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The Meaning of Wilderness to Economically and Socially Disadvantaged Youth

Results of a three-year pilot program and study of a seven-day backpacking experience to disadvantaged youth at Atlanta, Curlew, Timberlake, and Trapper Creek Job Corps Centers

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Chapter 1. Introduction

The scientific literature concerning the use of wilderness as a medium for treating economically and socially disadvantaged youth (ESDY) ranges from broad discussions of theoretical based approaches to specific studies designed to validate efficacy of such programs. Friese et al. (1996) compiled an annotated bibliography which reviewed more than 150 studies of the use of wilderness for personal growth, therapy, and leadership. The literature suggests that these programs can enhance personal growth, improve self-esteem, and strengthen the locus of control adolescents have on their lives (Gibson, 1981; Kaplan and Kaplan, 1992; Plouffe, 1981; Wright, 1982). Levitt (1988) describes a growing recognition over time of the therapeutic value of a wilderness experience for people with social, psychological, and physiological disorders; this value is evidenced today by over 500 wilderness experience programs found to be currently operating in the United States (Friese, 1996).

This report presents a literature review of the foundations, theory, and research of how wilderness works as a therapeutic tool for treatment of economically and socially disadvantaged youth (ESDY), referred to in the literature as "youth-at-risk," "emotionally disturbed youth," "juvenile delinquents," problem youth," and "problem adolescents," to name a few designations. The magnitude and variety of psychological problems that affect adolescents' emotional well-being in contemporary society will be discussed to examine the scope of the problem.

Then the report will focus on data from a study of wilderness experience by 16-24 year-old students enrolled in a formal educational and vocational program in the Federal Job Corps. Job Corps students have an 84 percent high school dropout rate, an average seventh grade reading level, no formal job training and many having had brushes with the law prior to enrolling in the volunteer program (Navarro and Associates, 1990). Job Corps students are identified by the following characteristics which were found to be consistent with literature describing ESDY (Felner et al., 1995):

- a history of living at or below the poverty line
- a history of substance abuse
- victims of physical, sexual, psychological, and emotional abuse
- a full range of learning disorders
- poor social skills
- history of failure in school and/or other programs
- below average reading levels (Pitstick, 1995, p. 6).

The purpose of this paper is to explore the meaning of wilderness to ESDY will be explored by analyzing data from a three-year pilot program and study of a seven-day wilderness experience program for Job Corps students. Preventive strategies shown in the literature to work in changing the life trajectory of ESDY are reviewed and a framework is created to illustrate how WD enhances specific characteristics of these strategies. The conclusions generated offer insight into what a wilderness experience means to economically and socially disadvantaged youth.

Scope of the Problem

The number of young people who grow up in chronic poverty and social disadvantage is a problem in the United States that borders epidemic proportions (Felner et al., 1995). The evidence of these social ills are everywhere, reported in high-school dropouts, violent crime, unemployment rates, and substance abuse. The levels of violence are increasing in prevalence and seriousness, particularly among children and adolescents (Tolan et al., 1995). Homicide is now the leading cause of death for African american males age 15-24, and the rate of homicide death is growing fastest among children (Center for Disease Control, 1992).

Currently, approximately one out of every five children under the age of 18 lives in poverty (U.S. Bureau of Census, 1989), and increasing numbers are being victimized by violence (Rosenberg, 1986), and surveys show that exposure to violence is high for many children (Attar et al., 1994). The impacts that these social and economic disadvantage can have on levels of emotional, physical, and intellectual development of youth have been underscored (Edelman, 1987).

Poverty is consistently correlated with school age childbearing, school failure, and violent crime (Schorr, 1988). In a study by Felner et al., (1995) on development of children, youth from families that were characterized by lower levels of occupational status, the factor most related to economic hardship, reported experiencing greater maternal rejection, less social support, less of a sense of belonging at school, and greater exposure to stressful events. This sense of dysfunction can also lead to depression which can cause social withdrawal on the part of an individual and avoidance on the part of others (Armsden et al., 1990).

Consequently, economically and socially disadvantaged youth have impaired self confidence and negative cognitions about the self and their ability to relate to others. The American Psychological Association Commission on Youth Violence (1994) and the National Research Council (1993) are examples of scientific panels that have reviewed the problems associated with ESDY and suggested a need to increase the connection between prediction, prevention interventions and services (Tolan et al., 1995). Coupled with these suggestions was the conclusion that there needs to be broad social interventions and alternative strategies for treatment of this growing population of young people.

Prevention Strategies

Epidemiological studies on the prevalence of emotional disorders in the United States suggest that 4 million of the 26 million adolescents between the ages of 12 and 19 have emotional problems severe enough to require treatment (Davis-Berman and Berman, 1994, p. 7). An important index of psychopathology among adolescents, suicide, illustrates well the severity of their needs. A Center for Disease Control study found that one of every 12 high school students tried killing themselves in the year preceding the study (In Davis-Berman and Berman, 1994). The rate of completed adolescent suicides has tripled in the last 30 years, and is now the third leading cause of death in this age group (Berman and Jobes, 1991). These disturbing statistics are illuminated by the estimate that between 70% to 80% of the children with clinical mental disorders may not be getting the mental services they need (Tuma, 1989).

Current explanations for delinquency can be roughly categorized into (1) those emphasizing the general societal structure (Cloward and Ohlin, 1960; Merton, 1957, 1964; Shaw and McKay, 1969), (2) those concerned with peer structures and the individual's social network (Matza, 1964; Sagarin, 1975; Sutherlin, 1978), and (3) those focused on individual needs (Hirschi, 1969; Wilson and Hirstein, 1985). No one of these approaches can fully account for delinquency, therefore an integrated approach in dealing with the causes of delinquency in incorporating these three main topic areas is needed.

Not enough services are available, and the services that are available, are not always suited for adolescents' unique needs. There is a lack of middle ground between outpatient services, that can be inadequate, and inpatient programs, that can be overly restrictive (Tuma, 1989). Youth are often disinclined to commit to and remain in outpatient counseling. Several factors can be involved in their resistance including: (1) a feeling of stigmatization; (2) resentment in being the identified patient in the family; (3) resistance to the restrictions of office-room therapy; (4) geographic location; (5) costs, and; (6) waiting lists (Davis-Berman &Berman, 1994).

In addition to access to and availability of mental health services, there are limitations inherent in the provision of traditional services. Some limitations include: (1) lack of full range of options which lead to adolescent being placed in a more restrictive setting than necessary; (2) they encourage people to be "patients"—docile and compliant—and may even contribute to learned helplessness (Seligman, 1975), and; (3) short blocks of time in an office make it difficult for adolescents to trust or warm up to a therapist (Davis-Berman & Berman, 1994). Lastly, and most importantly, many adolescents have grown up in a dysfunctional environment in which their behavior is not perceived to be abnormal. Thus, they are unable to see and recognize their problems, primarily because their behavior is maintained and perpetuated by their environments. The problems and limitations described in this section can be overcome by providing a counseling milieu utilizing a wilderness experience component.

Chapter 2. Literature on the Value of Wilderness Experience Programs

This chapter contains a review of literature on the kinds of wilderness experience programs, especially for youth-at-risk and a review of program effects on participants. Each of these topical areas and associated literature are described for their relevance to this study. Where reviews turned up a substantial number of studies, a table is presented to better illustrate the depth of literature germane to that topic.

Wilderness Experience Programs

Friese, Pittman, and Hendee (1995) compiled an annotated bibliography of nearly two hundred studies of the use of wilderness for personal growth, therapy, and leadership development. These studies also support the theoretical assumptions concerning the positive effects of wilderness experience on participants used in this study. The term "wilderness experience program" is defined in this study as

> a program of wilderness experience designed to develop human potential through personal growth, education, therapy, or leadership development (Hendee, 1988). The wilderness experience is theorized to provide change from usual life patterns and the chance for other emotions to emerge, as well as atonement to the natural environment and its processes (Hendee & Brown, 1988). Different approaches range from hard, technical skills utilizing "high stress" activities environment, to a soft skills approach using low stress activities allowing the participants more time to reflect on their past and present lives.

The scientific literature concerning the use of wilderness experience programs as a way to help rehabilitate people with social and psychological problems has been well documented. Literature reviewed by Friese et al. (1995) including 187 studies of participants of wilderness programs, supplemented by literature reviewed by Pistick (1995), suggest that these programs can enhance personal growth, improve self esteem, and strengthen the locus of control students have on their lives (Gibson, 1981; Kaplan & Kaplan, 1989; Plouffe, 1987; Wright, 1982). Levitt (1988) suggests there is a growing recognition of the value of such programs, and that individual benefits may transfer to larger societal and economic benefits as well. It is this central premise which underlies the design of Wilderness Discovery and is the guiding focus of the two-year pilot program and study of Wilderness Discovery.

Two types of reviews were conducted under the topic of wilderness experience programs. The first was to gather all relevant studies on wilderness experience programs targeted at youth-at-risk. The second was to gain an understanding of the type and scope of training and leadership programs. This information provided Wilderness Discovery with a list of prerequisite skill and knowledge that would be required of all leaders working with this population of students.

Youth-at-Risk and the Wilderness Experience

Youth-at-risk are defined as young people 16 to 24 years of age who "...are not able to acquire and/or use the skills necessary to develop their potential and become productive members of society" (Dunn & Dunn, 1987, in Redick & Vail, 1991, p. 2).

In this study, the term economically and socially disadvantaged youth (ESDY) is used to depict youth which the literature has defined as "youth-at-risk." This was done to better describe young people from disadvantaged backgrounds. Moreover, it can be argued that most, if not all, young people today could be considered "at-risk" from one thing or another. This definition was selected for its particular applicability to Federal Job Corps students, who have a history of both social and economic disadvantage. The literature will be reported under the term "youth-at-risk" as that has been the definition used most frequently.

Many other terms have been used in the literature to describe youth-at-risk. Included are "juvenile court probationers," "emotionally disturbed adolescents," "mentally disordered first offenders," "problem youth," "juvenile delinquents," "emotionally disturbed problem teenagers and delinquents," "adjudicated delinquents," "delinquent youth," "problem adolescents," "drug abusing adjudicated adolescents," "pre-delinquent youth," and "behavior disordered adolescents." Youth enrolled in the Federal Job Corps program generally fit few if any of these alternative descriptions. While many students have struggled with various kinds of substance abuse, most have not had serious encounters with the legal system. Youth-at-risk who have been convicted of a felony or violent behavior are not eligible for Job Corps.

The literature overwhelmingly suggests that youth-at-risk tend to benefit more than other wilderness users from participation in a wilderness experience. This may seem surprising given a kind of implicit (and mistaken) common assumption that only middle class and above members of society can understand and benefit from a wilderness experience, despite the evidence to the contrary in the literature.

Kraus (1982) states that the wilderness experience aids emotionally disturbed adolescents in reaching various therapeutic goals, including a reduction in aggressiveness. Studies by Gibson (1981), Gaston (1978), Clagett (1989), Castellano et. al. (1992), Bateman (1990), Bandoroff (1992) Plouffe (1987), Sale (1992), Weeks (1985) and others report various therapeutic benefits of a wilderness experience for youth-at-risk, including reduced recidivism, significant positive changes on self-concept measures, reduced frequency of deviant behaviors, improved locus of control, fewer arrests, improved social skills, and greater cooperation.

Several studies (for example, Minor & Elrod, 1990; Chiles, 1984) reveal important results for youth-at-risk. Table 1 presents studies under the topic of wilderness experience programs for youth-at-risk.

Table 1. Literature Documenting Youth at-Risk (Pitstick, 1995)

Author	Title	Date
Elrod, H. Preston & Kevin I. Minor	*Second wave evaluation of a multi-faceted intervention for juvenile court probationers*	1992
Kraus, Ingrid Wiener	*The Effectiveness Of Wilderness Therapy With Emotionally Disturbed Adolescents*	1982
Klorer, Gussie P.	*Leaping beyond traditional boundaries: Art therapy and a wilderness stress challenge program for adolescents*	1992
Kimball, Richard Owen	*Wilderness Experience Program: Final Evaluation Report*	1979
Gibson, Peter McKenney	*The Effects Of, And the Correlates of Success In A Wilderness Therapy Program For Problem Youth*	1981
Gaston, Debra Wickstrom	*An Empirical Investigation of a Wilderness Adventure Program for Teenagers: The Connecticut Wilderness School*	1978
Clagett, Arthur F.	*Group-integrated reality therapy in a wilderness camp*	1992
Clagett, Arthur	*Effective therapeutic wilderness camp programs for rehabilitating emotionally -disturbed problem teenagers and delinquents*	1989
Chiles, Austin M., Jr.	*Antecedents And Outcomes Of Male Delinquents Referred To The Utah State Youth Development Center For Survival Training*	1984
Castellano, Thomas C., & Irina R. Soderstrom	*Therapeutic wilderness programs and juvenile recidivism: A program evaluation*	1992
Cardwell, Guilfoyle. R.	*Adapted Outward Bound Programs: An Alternative for Corrections*	1976
Bateman, Kenneth Vaughn, Jr.	*Changes In Self-Concept And Behavior Of Adolescents In A Wilderness Therapeutic Camp*	1990
Basta, Joanna M., & William S. Davidson	*Treatment of juvenile offenders: Study outcomes since 1980*	1988
Bandoroff, Scott	*Wilderness Family Therapy: An Innovative Treatment Approach For Problem Youth (Boys)*	1992
Gillis, H. Lee, & Cindy Simpson	*Project Choices: Adventure-based residential drug treatment for court-referred youth.*	1991
Kleiber, Larry Charles	*An Experiential Education Intervention For At-Risk Youth In The Eagle County School District*	1993
Minor, Kevin I., & H. Preston Elrod	*The effects of a multi-faceted intervention on the offense activities of juvenile probationers*	1990
Plouffe, Mary Elizabeth Mahoney	*A Longitudinal Analysis Of The Personality AND Behavioral Effects Of Participation In The Connecticut Wilderness School: A Program For Delinquent And Pre-Delinquent Youth*	1981
Porter, William W.	*The Development and Evaluation of the Wilderness Experience Program*	1975
Ramphele, M. A.	*Adolescence: A Time for Reflection. Research Report: Wilderness Leadership School Trails for Children from New Crossroads. 1991-1992.*	1992

Sachs, John Jaroslav	*The Impact Of A Modified Wilderness Camping Program On The Social Interactions And Social Expectations Of Behavior Disordered Adolescents*	1982
Sale, Paula Lindsay	*Ego And Self-Concept Development Among Juvenile Delinquent Participants In Adventure-Based Programming*	1992
Traynelis-Yurek, Elaine & George Giacobbe	*Length of Stay and Age Affect Recidivism After a Quality Treatment Program*	1988
Weeks, Sharon Zirkle	*The Effects Of Sierra II, An Adventure Probation Program, Upon Selected Behavioral Variables Of Adolescent Juvenile Delinquents*	1985
White, Emily	*Education In Non-School Settings: A Case Study In Reflective Practice*	1987
Williams, Theodore Eugene	*The Effects Of A Brief Adjunctive Physical Challenge Wilderness Program On Locus Of Control In Adolescent Substance Abusers*	1984
Mason, Marilyn Jean	*Relationship Enrichment: Evaluating The Effects Of A Couples Wilderness Program*	1980
Beecham, Joe & John Flood	*A Prospectus: The Connecticut Wilderness School, 1976-77*	1977

Wilderness Leadership Training Development Programs

The development of training and leadership standards for wilderness experience program leaders is a critical issue confronting the wilderness experience program industry operating in the United States. What makes a great leader? What special skills do leaders need to work with the various populations programs are designed for? Answering these questions was of critical concern to the development of Wilderness Discovery. Job Corps students are a special population of young people requiring special skills and knowledge by capable leaders.

Included in the category of training and leadership programs are three important books. First is Ewerts' (1989) work which is both research based and theoretical in nature. Ewert has produced a work suitable for use by both practitioners and academics including people with varying levels of outdoor expertise. The second book is written by David Cockrell (1991). The work comprises the body of knowledge needed by instructors for the Wilderness Education Association (WEA) and has been used as the text for semester long courses in wilderness leadership. Last is Nadlers and Luckners'

(1992) work combining counseling theory and outdoor adventure program practices. This work is intended as a resource and is not meant as a substitute in working with group processes.

Other literature in this category includes the work of Buell (1981), a comprehensive effort designed to measure the competencies (knowledge, skill, and behavioral) in adventure education programs. Through extensive pre-testing Buell (1991) developed the Outdoor Adventure Leadership Competency Survey consisting of 12 categories. One hundred and twenty respondents to the survey addressed 235 different competencies by selecting one of four possible responses for each competency. Using descriptive statistics and statistical measure of association Buell found 153 entry-level competencies and 193 experienced level competencies to be either essential or important. He recommends that outdoor adventure leaders be able to perform and demonstrate all of these skills at the appropriate level. It is somewhat suprising that there are still no nationally standardized competency requirements for outdoor adventure leaders or programs.

Aguiar (1986) compared various characteristics of more successful outdoor adventure leaders with those of less successful leaders. He tested a series of seven hypotheses including leadership opinions, personality characteristics, vocational and leisure interests, age, education, experience, and gender. Aguiar used three instruments to gather data (the Leadership Opinion Questionnaire, 16 Personality Factor, and Strong-Campbell I interest Inventory), and then used analysis of variance, person r, and the t-test to evaluate the data. Those leaders with more education as well as higher levels of experience were more successful. .

Table 2. Literature Documenting Training and Leadership Programs (Pitstick, 1995)

Author	Title	Date
McMillon, Bill	*Wilderness U.: Opportunities for Outdoor Education in the U.S. & Abroad*	1992
Heywood, John	*Collective Social Groups in the Wilderness: Problems and Prospects*	1990
Ewert, Alan	*Outdoor Adventure Pursuits: Foundations, Models, and Theories*	1989
Buell, Lawrence H.	*The Identification Of Outdoor Adventure Leadership Competencies For Entry-Level And Experienced-Level Personnel*	1981
Aguiar, James D.	*Analysis Of Successful Adventure Leaders*	1986
Cockrell, David (ed).	*The Wilderness Educator: The Wilderness Education Association Curriculum Guide*	1991
Medrick, Frederick Wilderness. III	*The New Age Wilderness Leader: A Rationale And Experiential Model For Training*	1985
Middleman, Rochelle Joy B.	*Factors Relating To Counselor Performance In A Therapeutic Wilderness Camp Setting*	1988
Nadler, Reldan S., & John Luckner	*Processing the Adventure Experience: Theory and Practice*	1992
Neely, Margery A., & Emily B. Kling	*Effects of leadership training during wilderness camping*	1987
Raiola, Edward O.	*Outdoor Wilderness Education - A Leadership Curriculum*	1986
Riggins, Ronald D.	*Effective learning in adventure-based education: Setting directions for future research*	1986
Stolz, Paul Guilfoyle.	*Developing Communication Skills Through Outdoor Experiential Leadership Training: A Quantitative And Qualitative Analysis*	1989
Galpin, Timothy J.	*The Impact Of A Three-Day Outdoor Management Development Course On Selected Self-Perceptions Of The Participants*	1989
Dainty, Paul & Donna Lucas	*Clarifying the confusion: A practical framework for evaluating outdoor development programs for managers*	1992
Long, Janet Wilderness.	*The wilderness lab comes of age*	1987
Roland, Christopher C.	*An Experiential Learning Model*	1992

Review of Wilderness Experience Program Effects

The summarizes literature on wilderness program and personal growth effects. Measuring the effects of wilderness experience programs is difficult. For example, what is improved self-confidence? How will this affect a young persons performance in school, the job place, or in basic social situations? Utilizing an extensive computer search in three major University libraries --the University of Idaho, Washington State University, and the University of Washington-Seattle. Randy Pitstick (1994) explored all available data bases, including ERIC, PscyhLIT, Sociofile, Agricola, Bibliofile, Dissertation Abstracts, and others. Where possible, copies of books, theses, dissertations, and journal articles for in depth analysis is acquired.

Global Observations

"Global observations" about the published research on the use of wilderness for personal growth, therapy, education an leadership development include (Pitstick 1994):

1. There are very few long term studies;
2. There are methodological weaknesses in many, if not most, studies;
3. There is a relative consistency to the findings despite the above weaknesses.

Studies supporting these global observations and literature pertinent to youth-at-risk and the wilderness experience are reviewed--with specific reference to variables related to the Wilderness Discovery program being developed for youth-at-risk in the Job Corps.

Few Long-Term Studies

There are few long-term studies of the effects of participation in a wilderness experience. The majority of studies consist of pre- and post-trip questions, and only rarely were longer term follow-ups attempted. Kaplan and Kaplan (1989) and Talbot and Kaplan (1986) conducted a study of the same wilderness experience program for ten years from which they developed the concept of wilderness and other natural areas as "restorative" environments. Kaplan and Kaplan (1989), after studying participants in the same wilderness program for youth Michigan for ten years, state that "The mutually supportive pattern of results and the pervasiveness of the observed changes strongly suggest that the different summer experiences led to changes that were not only substantial but also sufficiently durable in character to be evident some months later" (p. 129). They also report that their "...findings with respect to self-esteem correspond to Burton's [1981] conclusions. There were some gains and some 'no changes,' and no negative findings" (Ibid., p. 128).

Robert Greenway, professor of psychology at Sonoma State University, over the course of 22 years work, led some 1,400 college students on two and three-week wilderness trips as part of his wilderness psychology academic program. Greenways' (1990) research indicates significant long-term effects in the lives of many of the participants. Many students made lifestyle changes--such as changes in relationships, school, work, and/or addictions to nicotine or caffeine--following completion of the semester-long course and its two or three week wilderness backpacking trip. He also reports that 80% of the participants reported their initial return to the culture as a positive experience, but within forty-eight hours, 53% reported that the positive feelings had temporarily turned to feelings of depression (Greenway, 1990). Over the years Greenway made adjustments to the program to facilitate the re-entry into culture. Some of these adjustments included encouraging students to adopt a practice (e.g., yoga or meditation) that would enable them to experience forms of consciousness experienced in the wilderness, encouraging students to "let go" of the wilderness experience, and encouraging students to return to the culture as slowly and gently as possible.

Leslie Burton (1981) assessed 73 graduate research studies of Outward Bound and related wilderness programs. He estimated that there are over 300 wilderness programs for a variety of populations including juvenile delinquents, psychiatric inpatients and outpatients, corporate managers, and educators. The Outward Bound programs in Burton's review included both normal populations and some populations of youth-at-risk (what he referred to as "delinquents"). Burton determined that a sub-sample of 19 studies were methodologically adequate. His conclusion for both the larger set of 73 studies and the subset of 19 studies was that, in general, Outward Bound programs have a positive impact upon self concept, sense of personal control and self assertion, and personality. Recidivism of delinquents was markedly reduced in the methodologically adequate studies.

Additional long term studies include Driver, Peterson & Easley (1990) which focused on participants in the Wind River Wilderness Course of the National Outdoor Leadership School from 1973 to 1984.

There Are Methodological Weaknesses In Many, If Not Most, Studies

Other researchers have reported on methodological. Pre- and post trip questionnaires are the most common source of data. Burton (1981) noted that most of the studies he reviewed were "global outcome studies," and that few of them actually compared program characteristics with their results. He also notes that little is known as to the type of activities, group size, or instruction, all key factors, which may influence the effectiveness of Outward Bound-type programs.

Basta and Davidson (1988), in a journal article entitled *Treatment of juvenile offenders: Study outcomes since 1980*, noted that there are serious methodological weaknesses in the literature, including small sample sizes, lack of use of appropriate and multiple measures of recidivism, lack of appropriate control groups, and absence of long-term follow-up. Kraus (1982) notes that previous research is flawed in either design or statistical analysis.

Huie (1982) calls for more creative research design and selection of instruments in future research. He also suggests a combination of qualitative and quantitative methods to more accurately assess the kinds of changes promoted in structured wilderness programs. Ewert (1988) suggested that there is a need for studies to examine anxiety and level of fear rather than the usual positive outcomes. Zwart (1988) suggested that qualitative research methods and research on specific program variables would be appropriate in future research. An earlier study (Steiger, 1986) combined data from standardized tests with anecdotal, observational and case study material.

Schreyer, Williams and Haggard (1990) suggested that a need exists to focus more on the benefits of long-term participation. Driver, Nash and Haas (1985) describe the need for more objective information on wilderness benefits, and note that most knowledge about benefits is based on introspective appraisals of benefits inferred from human preference studies.

Watson and Niccolucci (1992) note that wilderness users are usually asked multiple questions about their experience. These questions are often combined into unidimensional scales for hypothesis testing, without consistency in standardization or weighting methods.

There is a Relative Consistency to the Findings

The pattern emerging from the literature review of more than 200 studies is a consistent finding of increased self-esteem and sense of personal control for wilderness experience participants--and youth-at-risk seem to respond even more positively to the wilderness experience.

Bunting (1989) suggests two areas of positive impact in a wilderness experience--the natural environment itself and the natural challenge activities that are available in such an environment. Ewert (1990) found significantly lower levels of Trait Anxiety for Outward Bound participants 1-year after their experience.

Mang (1984) found mixed results, including suggestive evidence for the restorative effects of a wilderness experience. Other self reported measures were not significant but were in the predicted direction. Vogl & Vogl (1990), in a review of twenty-four dissertations reported that more than 60% of the studies had positive impacts on participants, primarily in the areas of self-concept and improved social relations. The following tables (Tables 3, 4, 5) identify studies addressing positive effects on participants in terms of: (1) self concept; (2) personal growth; and (3) a feeling of solitude.

Table 3. Literature Documenting Self-Esteem (Pitstick, 1995)

Author	Title	Date
Callahan, Robert C. Jr.	*Wilderness Awakening: Probation Counseling and the Wilderness--A Dynamic Team*	1990
Lunke,, James R. Jr.	*Using The Wilderness As A Facilitator For The Growth Of Self-Concept*	1982
Gillett, et. al.	*The effects of wilderness camping and hiking on the self-concept and the environmental attitudes and knowledge of twelfth graders*	1991
Bertolami, Cheryl	*Effects of a Wilderness Program on Self-Esteem and Locus of Control Orientations of Young Adults.*	1981
Adams, Chauncey S.	*Effects of Wilderness Experience On High School Students Of Varied Defensive Patterns*	1982
Cockrell, David	*Changes in Self-Efficacy Through Outdoor Skills Instruction*	1990
Easley, Arnold T.	*The Personality Traits Of Wilderness Leadership Instructors At NOLS: The Relationship To Perceived Instructor Effectiveness and The Development Of Self-Concept In Students*	1985
Hazelworth, Maureen & Beth Wilson	*The effects of an outdoor adventure camp experience on self-concept*	1990
Marsh, Herbert Wilderness & Garry Richards	*Self-other agreement and self-other differences on multidimensional self-concept ratings*	1990
Marsh et. al.	*Multidimensional Self-Concepts: The Effect of Participation in an Outward Bound Program*	1986
Martin, Peter B.	*The Effect Of An Outdoor Adventure Program On Group Cohesion And Change In Self-Concept*	1983
Munn, Walter D.	*The Impact Of A Brief Therapeutic Wilderness Experience On Locus Of Control And Self-Esteem Of Handicapped Adolescents*	1983
Pfrman, Elenore	*The Effects Of A Wilderness Challenge Course On Victims Of Rape In Locus-OF-Control, Self-Concept, And Fear*	1988
Pratt, Kathryn J.	*Experiential Education: Integrating The Analytic And Intuitive Modes Of Learning*	1978
Schreyer, Williams & Haggard	*Episodic versus Continued Wilderness Participation--Implications for Self-Concept Enhancement*	1990
Shin, Won Sop	*Wilderness Campers' Attitudes And Their Self-Actualization Based On A Study In Three Ontario Provincial Parks*	1992
Steiger, Harold J.	*The Effects Of A Group Based Wilderness Adventure Program On The Moral Reasoning, Sociomoral Attitudes, And Self-Esteem Of Adolescents*	1986
Zwart, Timothy	*The Effects Of A Wilderness/Adventure Program On The Self-Concept, Locus-Of-Control Orientation, And Interpersonal Behavior Of Delinquent Adolescents*	1988

Table 4. Literature Documenting Personal Growth (Pitstick, 1995)

Author	Title	Date
Hendee, John C., & Michael H. Brown	*How Wilderness Experience Programs Work for Personal Growth, Therapy and Education: An Explanatory Model*	1988
Leon, Edward L.	*Joy in Living in a Wilderness Milieu*	1990
Galagan, Patricia	*Between two trapezes*	1987
Foster, Steven & Meredith Little	*The Book of the Vision Quest*	1980
Conger, Jay A.	*Personal growth training: Snake oil or pathway to leadership*	1993
Baillie, Robert William	*Mental Training For Mountaineering*	1983
Brown, Michael	*Wilderness Vision Quest: Exploring the Frontiers in Human Resource Development*	1987
Donaldson, Fred O.	*Finding Our Way with Play: Lessons from Wilderness Playgrounds and Wildlife Playmates*	1990
Davidson, Scott J.	*Upon A Hill They Stood: Experience And Change In Adventure Group School Counseling*	1987
Miles, John C., & Simon Priest	*Adventure Education*	1990
Phipps, M.	*The Instructor and Experiential Education in the Outdoors*	1988
Pitstick et. al.	*The Wilderness Discovery program for Poverty Youth in the USDA Forest Service--Curlew Job Corps Conservation Center in the Colville National Forest*	1993
Potter, Tom Guilfoyle.	*Large Group Weekend Outdoor Experiences: Finding Meaning - Nurturing Growth*	1992
Zook, Lester R.	*Outdoor Adventure Programs Build Character Five Ways*	1986
Scherl, Lea M.	*Self in Wilderness: Understanding the Psychological Benefits of Individual-Wilderness Interaction Through Self-Control*	1989

Table 5. Literature Documenting Solitude (Pitstick, 1995)

Author	Title	Date
Hollenhorst et. al.	*The Capacity To Be Alone: Wilderness Solitude and Growth of the Self*	1993
Hammitt, William E., & Mark A. Madden	*Cognitive dimensions of wilderness privacy: a field test and further explanation*	1989
Priest, Simon, & Richard Bugg	*Function of privacy in Australian wilderness environments*	1991
Richley, Anna-Louise	*A Phenomenological Investigation Of Wilderness Solitude*	1992
Vest, Jay Hansford C.	*The Philosophical Significance of Wilderness Solitude*	1987

Conclusions

The review of the literature conducted on Job Corps, youth employment, wilderness experience programs, and review of program effects revealed the following conclusions:

1. Consistent findings from a review of nearly 200 studies (Friese et al., 1995) show wilderness experience programs provide benefits to participants in terms of increased self esteem and sense of personal control from numerous studies done on effects of programs on participants. There is some evidence that disadvantaged and at-risk youth can benefit as much or more than young people from more affluent social upbringings for whom wilderness experience programs are more accessible.

2. The social benefits of wilderness experiences documented in the literature, such as enhanced self-esteem, lends support to the findings and conclusions of the Wilderness Discovery pilot program and study--namely, the benefits derived and simulation of potential benefit to costs relationships of expanding Wilderness Discovery in Job Corps (Hendee and Russell,1997).

These conclusions from the literature provide a theoretical basis to research more closely the meaning of wilderness to economically and socially disadvantaged youth by studying Wilderness Discovery, a unique wilderness experience program, as an adjunct to the Job Corps program.

Chapter 3. Theoretical Understanding of Wilderness Experiences

Guided by their unique paradigms, philosophers, academics, writers, scientists, and artists have all attempted, and succeeded in defining wilderness. These cultural definitions of wilderness have changed dramatically throughout the last century as the march of our modern world has cornered the few remaining natural areas. As technology and economic growth ushers us into the 21st century, the economic lens with which we view most natural areas has paradoxically helped define wilderness. Scarcity has worked to make the remaining wilderness areas highly valuable resources, and valued not just for its ability to provide commodity production.

The official definition of wilderness can be found in the Wilderness Act of 1964 (P.L. 88-577), describing wilderness as:

> an area where the earth and its community of life are untrammeled by (humans), where humans themselves are visitors who do not remain…(1) wilderness appears to have been affected primarily by the forces of nature, with the imprint of humans work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and uncofined type of recreation; (3)…is of sufficient size…; and (4) may also contain ecological, geological or other features of scientific, educational scenic or historical value.

It is in this wilderness environment, in juxtaposition to our modernized and increasingly urban culture, that the restorative aspects of wilderness work in tandem with theories of how wilderness works for personal growth and inspiration. In order to understand this process, it is first important to understand theories of how the wilderness experience works to foster personal growth, interpersonal growth, and inspiration.

Using an inductive approach, theories associated with how wilderness works in the development of the self and the development of community were generated using a grounded theory approach. The majority of the work was conducted by Randall Pitstick (1995), Ph.D. in his dissertation *The Meaning and Effects of a Seven-Day Wilderness Experience for Youth-At-Risk in the Federal Job Corps Program.* Other theory and conclusions were generated in a report by Hendee and Russell (1996) to Job Corps entitled *Results of a Two-year Pilot Program and Study to Test a Wilderness Experience Program for Job Corps Students*.

These hypotheses are later applied to existing frameworks of proven prevention strategies to develop a framework to illustrate how a wilderness experience program can enhance existing prevention strategies. As Kelly (1983) stated in his critique of theory:

> ...one model of theory presumes a rigid system of logical deduction that produces invariable "laws" of predictive accuracy. At the other extreme, theory is seen as a kind of metaphor that suggests that, "If you view something from this perspective, it can be understood as follows (p. 47).

The discussion of the "metaphor" in this instance allows the set of phenomena that are theories of how the wilderness works for personal growth, interpersonal growth, and inspiration to be synthesized with existing prevention strategies of delinquency in ESDY.

Development of Self

One theoretical element that could be useful in understanding the diverse set of phenomena that comprise ESDY is the self concept (Oyserman and Markus, 1990). The self concept regulates both interpersonal and intrapersonal behavior and is an important feature in may explanations of delinquent behavior (Kaplan, 1975). Adolescence is a critical stage of possibility in the life course of an individual, with questions begging answers as to the future possibilities which one can expect.

What do I want to be when I get older? Will I be rich and have a lovely home by the ocean, or will I be lonely with no one to care for me? The confusion surrounding when childhood ends, when and how adulthood begins, and what their culture expects of them places adolescence on what Cohen (1991) refers to as a knotted rope bridge of symbols and magic between childhood and maturity strung across an abyss of danger. For ESDY youth walking this rope in an environment that is far less forgiving, the effects of failure, dysfunction, and their consequences can have impacts that will last a life time.

Restorative Aspect of Nature and Self Concept

Much has been written on the restorative aspects of nature (Kaplan and Talbot, 1983; Knopf, 1983). Kaplan and Talbot (1983), in the *Experience of Nature* suggest that many of us retreat to natural areas when we feel "worn out, ready for a break or respite" (p. 178). This can happen as a result of stress, which they view as a defense mechanism in anticipation of threat. Stress from prolonged exposure to work or school related activities, can tax a person to the point of exhaustion. This is especially the case for young people from socially and economically disadvantaged environments who experience, "less social support, less a sense of belonging at school, and greater exposure to stressful events" (Felner et al., 1995).

The importance of being away from one's usual setting or situation has been well documented in studies of the motivations of wilderness users and other outdoor recreationists (Driver and Knopf, 1976; Knopf, 1983, 1987). Kaplan (1978) builds on the notion of restorative effects of natural environments by introducing the idea that nature, in all its complexity and beauty elicits deep seated and automatic responses by individuals in the absence of extensive information processing. Kaplan (1978) believes that restoration derives from the reduction of stimulus and arousal due to natures calming effect which elicits positively toned emotional states and blocks out negatively toned feelings. Nature removes individuals from their accustomed culture and surrounds them with a natural world that is very calming and nurturing. The impact this has on emotional states and thought processes can be very positive, and indeed restorative.

In the development of the self, the wilderness as a restorative environment offers cognitive quiet, room for reflection, and opportunity for restoration realized by "soft fascination (Kaplan and Kaplan, 1989). Clouds, streams, sunsets, wildlife, or a stream cascading down a mountainside—these scenes hold attention but in an undramatic fashion. Some fascination is so powerful that one cannot think of another concept or idea at the same time. Soft fascination, by contrast, permits a more reflective mode. It is this mode that allows the individual to reflect on their lives, relationships, goals, and dreams.

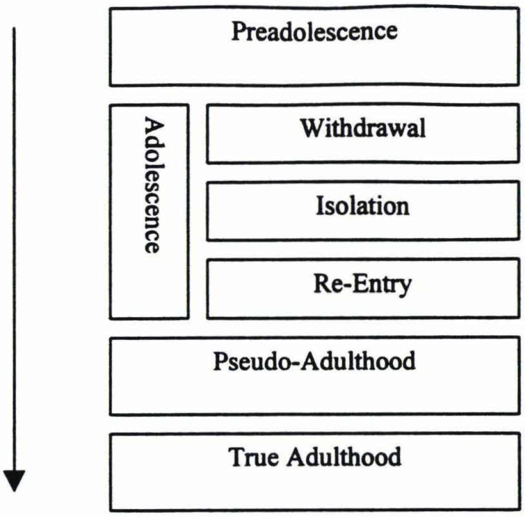
It is at this stage that the interaction with the environment has produced for the participant in a therapeutic process what Yalom (1995) would describe as a "…relief from anxiety or depression and a desire and need to learn to communicate with others, to be more trusting and honest with others, to learn to love (p. 21). Yalom describes the shift from relief of suffering due to a change from a dysfunctional, stressful environment to a nurturing one, sets the stage for change in interpersonal functioning and is an essential early step in the dynamic therapeutic process (Ibid.). The unique restorative aspects of wilderness environments provide for relief from anxiety or depression fostering a non-threatening environment and a cognitive mood prompting a desire to improve interpersonal skills.

Wilderness Experience as a Ritual Rite of Passage

Historically, many hunter/gatherer and herding cultures featured rituals marking the end of childhood and passage into adult status. These cultural devices met deep and intense needs of adolescence that are the result of a biological and psychological growth that preempts childhood. Modern western culture has done away with these powerful rituals and left the pre-adulthood phase one of confusion and frustration, leaving adolescents guessing where childhood ends, adulthood begins, and what their culture expects of them (Pinnock and Douglas-Hamilton, 1997). Adolescents retreat and attempt to continue youth, with peer-oriented isolation keeping them from realizing true-adult responsibility (Newton, 1996).

Due to the very nature of wilderness experience trips, the opportunity to participate in a ritual rite-of-passage is provided by simple and practical day-to-day activities. In this way, a wilderness experience creates an environment suited for an archetypal rite of passage for individuals—an opportunity to participate in an ancient method of personal transformation that has the potential to operate quickly, mysteriously, and powerfully (Kimball and Bacon, 1993). Mirroring the flow of adolescence phases posited by Newton (See Figure 1), a wilderness experience program mirrors the stages an adolescent goes through to enter the adult world. This experience provides powerful opportunities to mirror the experience back to the participants through careful facilitation using metaphor, ceremony, group discussion, and journal writing.

Figure 1: Adolescent Development Stages



(Newton, 1996, p. 30)

When adolescence enter into a wilderness experience they leave the culture from whence they came. Their family, social network, and amenities including watches, radios, flashlights, and cards are left behind to leave behind as much of their accustomed culture as possible. This withdrawal from that which is familiar exposes the youth to peers on the trip who are not friends, role models (the leaders), and themselves. This models the stage of withdrawal from childhood that represents the first stage of adolescence posited by Newton (1996).

On the wilderness experience, the participant is isolated from familiar culture in the wilderness, but moreover, is also encouraged to spend time alone in reflection on their current situation, their future possibilities and formulate a plan to realize set goals. Layover days and solo experiences isolate the participant from the social network established on the trip and allow young people quality time with their own thoughts and dreams. For many adolescents, they have never spent more than a few hours alone, and the experience of a single-or multiple-day solo is a daunting task, one that requires overcoming trepidation and a multitude of fears.

At the end of the solo experience, the participant returns to the group to begin the difficult task of processing the experience with the other members of the group. This process is the first of two stages during the wilderness experience that mirrors the re-entry phase, the third and final facet of adolescence posited by Newton (1996). Through careful facilitation, the group leaders discuss with participants the emotions, feelings, and experience they have just gone through on their solo experience. The group receives the individual and helps them process the experience to make it relevant and meaningful to their lives. This experience helps prepare the individual and group to begin the most difficult task of the experience—re-entry into their familiar culture outside of the wilderness.

Helping participants process what it is they have learned on the wilderness experience and how it relates to their every-day lives is a difficult task. Metaphor, focused journal writing, and careful facilitation of discussion help make this process meaningful and relevant for the participant. This is the adolescents' final stage before adulthood and mirrors the difficulty of the experience rather well. Many wilderness experience participants feel anxiety, depression, and apprehension when anticipating the return to the dysfunctional environments from which they came (Pitstick, 1995). This mirrors the apprehension felt by adolescents upon entering into adulthood. Again, the leader's job is to guide this experience to make it relevant and informative to transitions and rites of passage the adolescent is experiencing in their every day lives.

Using the stages of adolescence posited by Newton (1996), it is clear how the wilderness experience can mirror back this process to parallel the difficult transition being made by ESDY. This experience, in a restorative environment, allows for the adolescent to develop the self-concept that is emerging through biological and psychological growth in a non-threatening and caring environment. Through the nurturing and celebration of this important rite of passage for adolescence, they are reassured in the self-concept they have uncovered, and validated in their plight to realize adulthood. For ESDY, this process is vital, for the cultures from which they come are riddled with barriers that have created and encourage dysfunctional behavior and the inevitable postponement of the transition into the responsibilities of adulthood.

Development of Community

Another theoretical element that is consistently found in the literature and is useful in understanding the diverse set of phenomena that comprise ESDY is the social and interpersonal development of adolescence. This construct is reffered to as the Development of Community (DOC) in this study and includes peer relationships and social skill development. When people visit the wilderness, they usually do so in groups (Field and Leary, 1973). Under the assumption that those who visit the wilderness usually do so in groups, the community or group is critical element around which behavior in this setting is organized and should be studied (Knopf, 1983).

Social Skill Development

Adolescents who are at greater risk for delinquency are reported to have significant difficulties in a variety of social situations such as getting along with peers, teachers, parents, dealing effectively in group situations, making appropriate social choices, perceiving others' viewpoints (Short and Simeonsonn, 1986), dealing with one's own, and others aggression, and dealing with stressful situations (Goldstein, 1988). Poor parenting, family factors, and socioeconomic deprivation often severely limit positive social experiences for ESDY (Farrington, 1990).

Research has shown that socially manipulative and coercive behaviors and pro-social skill deficiencies are related to disruptive and antisocial behavior (Mathur and Rutherford, 1994). Delinquent behavior is often a manifestation of social skill deficits (Freedman et al., 1978), and faulty learning processes, and can be changed by teaching alternative pro-social behaviors (Gaffney and McFall, 1981). ESDY can enhance their likelihood of success an acceptance in society by learning appropriate and effective social behaviors that are necessary for independent living.

Hendee and Pitstick (1993), building on earlier work done by Hendee and Brown (1988), state in their exploration of how wilderness works for personal growth that people begin to socialize in different ways, where status differences dissolve, and candid interactions and sharing occur. Kaplan and Kaplan (1983) call this sense of integration, wholeness, and belonging to a holistic system *cohesion*. Jung (1933) and other transpersonal theorists emphasize the spiritual aspects of coherence in restorative environments as well. These processes are possible due to the cooperation and trust that is required on a wilderness experience trip. For a trip to work smoothly, thereby producing reinforcements for adolescents, participants need to cooperate, communicate well, take responsibility for oneself and the group, and learn to trust each other (Davis-Berman and Berman, 1994).

Peer Relationships and Acceptance

It is widely accepted in the social development literature that peer relations make unique contribution to social and emotional development (Berndt and Das, 1987;

Burhmester, 1990). The constructs of peer acceptance and friendship are two aspects of peer relations that have been studied most extensively, and it is recognized that both play a significant role in the development and maintenance of self-esteem and interpersonal skills (Bishop and Inderbitzen, 1995).

Harry Stack Sullivan (1953) was one of the first researchers to determine that the ability to establish friendships contributed to the maintenance of one's self worth during the adolescent years. He believed that it was within the context of intimate friendships that youths realize their own self worth as a result of the positive regard shown to them by their friends (Sullivan, 1953). Recent research has shown that friendships function as a source of ego support, emotional security, and intimacy, and can help adolescents develop an image of themselves as competent and worthwhile (Furman and Burmeister, 1985; Furman and Robbins, 1985).

Wilderness experience programs offer participants a unique opportunity to see their peers in a different light. Through the careful selection of trip participants, it can be assured that there are no existing close friendships or relationships among participants prior to the trip. This is done to facilitate students getting to know their peers whom they normally would not expend the energy or time to in their accustomed culture. This breaks down barriers of stereotypes and preconceived notions about people and can teach powerful lessons to students about the dangers of not giving someone a chance before they even get to know them.

Through a variety of day-to-day activities while on the program, participants are forced to work together to get a myriad of things accomplished, from cooking dinner, to setting up their tarps. Students are also taught that when conducting activities while in the wilderness, the group is only as strong as its weakest member. This instills an ethic that encourages them to help others in times of need. This lesson is difficult for many adolescents to comprehend due to individual survival techniques developed and mastered to survive in their dysfunctional environments. Getting to know peers in a wilderness setting allows them to break down stereotypes and practice their social skills in a non-threatening environment.

Wilderness experience programs mirror the family, school, and community environments that ESDY have had poor or negative response to in the past. Pro-social and more adaptive behaviors that were not directly reinforced in other systems are reinforced and appreciated in wilderness groups with direct and tangible consequences from appropriate behaviors.

Chapter 4. Theory of Group Counseling Applied to the Wilderness Experience

To further understand how wilderness experience programs work to foster the development of the self (DOS) and the development of community (DOC), therapeutic factors that contribute to personal and interpersonal learning in the group counseling milieu will be explored. The literature on group counseling fits nicely with wilderness experience programs because the process of personal and interpersonal learning take place in similar environments, with similar leadership techniques, and similar therapeutic factors at work reported in the literature (Davis-Berman and Berman, 1994; Levitt, 1988).

Also, the fusion of these two bodies of theory allow for (1) the factors at work in a wilderness experience program to be better communicated, (2) the processes in which personal and interpersonal learning take place in a wilderness experience to be researched using existing methods found in group counseling literature and thus, better understood, (3) the aid in the prediction of outcomes from participation in a wilderness experience program, and, (4) the internal and external validity of this paper to be strengthened by the reinforcement of theory and research methods with well grounded research found in the group counseling literature. In addition to these reasons, the emergence of a new field of wilderness experience programs, termed "wilderness therapy," supports the fusion of theory and incorporates into practice.

The Emergence of Wilderness Therapy

The field of wilderness therapy suffers from problems of definition (Gillis, 1992). Rehabilitative approaches such as "challenge courses," "adventure-based therapy," or "wilderness experience programs," are often used interchangeably to describe "wilderness therapy." Wilderness therapy can be seen as an alchemy of these and other types of approaches by employing a systemic hierarchy to capture the essence of each activity, arriving at a definition of wilderness therapy.

In the text *Wilderness Therapy: Foundations Theory and Research*, Davis-Berman and Berman (1994), both with extensive backgrounds as mental health professionals, make the first attempt at trying to define and operationalize the concept "wilderness therapy." In their book they talk of the need to move beyond traditional services, and how the lack of services available ""may lead some adolescents to be placed in more restrictive settings than required (Davis-Berman and Berman, 1994, p. 9). Using pieces of Davis-Berman and Bermans definition (1994), Russell (1997) came up with this working definition for wilderness therapy:

> The use of wilderness environments, with a group of adolescents, utilizing adventure-based activities, coupled with group therapy, over an extended period of time, comprises the alchemy of wilderness therapy. In this model, a challenging environment, a structured and nurturing social system, and carefully timed therapeutic interventions provide opportunity for accurate therapeutic assessment, self expression, honest and healthy relationships, and personal growth (Russell, 1997, p. 5).

Powch (1994) has said that to be called wilderness therapy the experience should take place in a wilderness and the wilderness should be approached with a therapeutic intention. In addition, for professional respectability, the participants of each program should be a clinically homogenous group with clinically diagnosed mental health disorders, and the staff should be composed of at least one state licensed or nationally certified therapist working with professionally qualified leaders of adventure activities.

It is important to note here that Wilderness Discovery would not be considered a therapeutic program by this definition because there are no licensed counselors on staff.

What this discussion of the emergence of wilderness therapy as a valid form of treatment to adolescents indicates is that the therapeutic factors inherent in group counseling processes can be enhanced through using wilderness environments. It is for these reasons that therapeutic factors found in group counseling are presented, discussed, and incorporated into the theroetical framework used in this paper.

Therapeutic Factors of Group Counseling Applied to the Wilderness Experience

Those therapeutic factors that contribute to personal and interpersonal learning found in the group counseling milieu manifest through the wilderness experience include the instillation of hope, universality, altruism, recapitulation of the primary family group, and the development of socialization techniques. How the wilderness experience works to foster these therapeutic factors will be presented. A discussion of interpersonal learning, a broad and more complex therapeutic factor, will follow, addressing the corrective emotional experience and the group as a social microcosm.

A model termed of how the wilderness works for ESDY will be presented which synthesizes the discussion of theories presented to provide the framework to test the Wilderness Discovery program on ESDY in the Federal Job Corps program. The concepts presented in this section draw heavily on group counseling theory presented in *The Theory and Practice of Group Psychotherapy* by Irvin Yalom (1995) These factors are positied by Yalom (1995) to be necessary for personal and interpersonal learning to occur in a group counseling setting. Each factor is presented and a short example of how a wilderness experience program addresses these factors is provided to strengthem theory presented earlier to illustrate how wildernesss experience programs work for ESDY.

Instillation of Hope

Faith in the treatment mode can itself be therapeutically effective. Yalom (1995) states that the belief and confidence in the efficacy of the group mode reinforced by the therapist through careful explanation of the group's healing properties can remove negative preconceptions of the group process (p. 4). Applied to the wilderness experience, this process takes place on the first day of any trip during what is often termed the "safety circle" when the leader facilitates a discussion of fears and expectations and establishes a "full-value contract" (Bacon, 1983).

The full-value contract is a tangible representation of the instillation of hope in the process by leaders and participants alike. Everyone in the group commits to the emotional and physical safety of themselves and every other member of the group. A "talking stick" is utilized to graphically show that every person will be heard, and when a person is speaking others are responsible for listening and respecting that individual. This process involves the leaders as well and clearly illustrates that "we are all in this together." Leaders clearly state to the group that he or she firmly believes that every member will be able to participate in the process and complete the trip safely. This process sets the stage for Yalom's (1995) notion of universality.

Universality

ESDY have a clear and heightened sense of uniqueness. They have had consistent negative feedback with each and every system they have operated in, whether it be a school, family, or work environment (Felner et al., 1995). Participants in a wilderness experience program find a great source of relief in the disconfirmation of their feelings of uniqueness (Yalom, 1995). They see that other members of the group are experiencing the same basic feelings of inadequacy in their lives.

As the wilderness experience process unfolds, the use of the group circle becomes a powerful tool to discover and develop universality among participants. The first group circle, the safety circle, places everyone on the same playing field in presenting the idea that we all have fears and expectations of this experience and we are all going to work together to accomplish the task at hand. Throughout the trip, the contact is revisited through intense facilitated discussion of group dynamics on the trip.

Issues such as feelings of inadequacy and an inability to feel a sense of empathy can all addressed through discussions which relate to the day's activities. The wilderness environment provides a constant source of feedback from the necessary and mandatory cooperation of individuals. Those who have experienced deep concern about their sense of worth and their ability to relate to others are empowered through these processes. An example would be when hiking, an individual could not carry on because of the weight of their pack. Another member offered to carry some weight, with the student saying "yes, thank you."

The discussion that evening surrounding this simple act has powerful metaphorical application. One member showed compassion and caring by helping another out, while the other broke down their barriers by asking for help and saying thank you. Each has seen that they can relate to others, show empathy, and ask for help when needed. That student who had trouble carrying the pack can contribute to the group in other ways, perhaps by filtering water or gathering wood for the fire. The wilderness experience provides constant opportunities to achieve universality, helping students overcome their feelings of inadequacy and start the process of learning to work with and trust others.

Altruism

The example above also helps illustrate how the wilderness experience addresses Yalom's (1995) notion of altruism. In therapy groups, group members receive not just from the giving receiving-technique, but also from the intrinsic act of giving (p. 12). The example above illustrated how members of a group living in balance with the natural world using bare essentials need to work together to survive. Each member has something to offer the group, a point that is made clear on the first day of any trip. For some the challenge will be hiking, while others have never cooked over camp stoves before. Those who feel comfortable in an activity are encouraged to teach and help others. The help is provided not just in physical activity, but also in emotional activity as well.

This is especially true in providing support, reassurance, and suggestions when processing an issue in the group circle. Group circles are held at least twice a day to "check-in" to see how everyone is doing or to process problems which inevitably arise among group members. Students are encouraged to bring up issues in their lives through sharing of journal writings and poems. Students are encouraged to offer advice and support for those individuals working through difficult problems, whether problems with drug addiction, their family life, or school. As Yalom states, group members "can be counted on for spontaneous and truthful reactions and feedback" (p. 12).

Corrective Recapitulation of the Primary Family Group

ESDY come from family environments of heightened levels of parent-child conflict and family disorganization which lead to both acute and potentially chronic stressors (Felner et al., 1995). The effect that these stressors have on relative levels of self-esteem, depression and anxiety, and behavioral problems in the home and school environment are well documented (Steinburg et al., 1992). Yalom (1995) points out that the group resembles a primary family environment, even in that the therapy team usually consists of a male and female team (p. 13). Members frequently act in this family setting similar to the way they acted in their primary family. This provides a wonderful opportunity to address issues from their family that were left unfinished.

Many wilderness experience program participants claim the group "became a family" during the trip (Russell and Hendee, 1997). For many ESDY who have never experienced the sensation of being an accepted member of a group or family, this dynamic is a powerful one. This is perhaps the first time in their lives they were accepted for who they are, and were allowed to be a part of a group that fought, lived, and loved like a family. The metaphor applied in this case is one that can deeply effect the student's relationships with others.

Development of Socialization Techniques

As Yalom (1995) clearly states social learning—the development of basic social skills—is a powerful therapeutic factor that operates in all therapy groups (p. 15). This is perhaps the most powerful therapeutic factor at work in the wilderness experience program for youth-at-risk. It is also the single most limiting factor of adolescents who are trying to improve their social standing by completing their education in hopes of obtaining and keeping a job (Navarro and Associates, 1992). The development of social skills as an objective can be traced back to the very first wilderness therapy program (Davis-Berman and Berman, 1994).

Participants in a wilderness experience are forced to communicate to others by the very nature of the process as described above. This idea is placed in a context of a caring, compassionate, and cooperative environment through the establishment of the full value contract. Peer confrontation is an integral part of the communication process, teaching students to confront their peers but do so in a way that is not vindictive or demeaning. As students work through problems and issues on the trip, they are practicing social skills in an environment devoid of accustomed culture and practice. In a study conducted on Job Corps students, the greatest benefit found from participation in a wilderness experience program as an adjunct to their ongoing training was the practical application and development of social skills in a non-threatening environment (Pitstick, 1995).

Interpersonal Learning

Yalom (1995) presents a strong argument for the importance of interpersonal relationships in personal development based on the notion that humans have potent and enduring social needs. His primary conclusions are that mental illness and deficits stem from disturbed interpersonal relationships and that the therapeutic process itself is an adaptive modification of interpersonal relationships (p. 24). Yalom's notions of the corrective emotional experience and the group as social microcosm, which fall under the guise of interpersonal learning, will be discussed and related to the wilderness experience.

The Corrective Emotional Experience

The importance of the corrective emotional experience in therapy, in that patients discover and address the inappropriateness of his/her interpersonal reactions, provides strong evidence for the use of group therapy to facilitate corrective emotional experiences (Yalom, 1995, p. 24). To properly deal with emotional situations with which people could not effectively deal with in the past, two conditions must met. They are: (1) the members must experience the group as sufficiently safe and supportive, so that tensions may be openly expressed, and; (2) there must be sufficient engagement and honest feedback to permit effective reality testing (p. 25). Again, the wilderness experience fosters the creation of this environment both physically and socially for this type of interaction to occur.

As students become more aware of themselves and their surroundings, they also become increasingly aware of each other (Pitstick, 1995). As the trip evolves, members of the group develop trust in each other through various activities while a safe environment slowly evolves as the therapeutic factors mentioned above begin to take affect. As the intensity of the experience begins to settle in, group dynamics can become constrained, at times creating problems amongst group members. As the issues are processed in group circle settings, strong expressions of emotion are directed at other members of the group and/or the leaders. Students are confronted by their peers and/or leaders, and become aware of the inappropriateness of their actions. The student is reminded of the full-value contract and the commitment made to be supportive and caring of others. The emotion is validated, yet the way it was handled is discussed by members of the group and suggestions are made as to ways of handling the situation more appropriately.

Understanding the implications of the strong emotional experience is of vital importance to therapy. The wilderness experience through alone time, reflection, self discovery and group reflections provide therapeutic factors that work to mutually reinforce each other. The absence of cultural influences that reinforce and maintain established patterns of behavior allow for the facilitation of corrective emotional experiences by young people who have never learned how to support, offer suggestions, or provide feedback to a person going through this process. The safe environment and established "norms" of trusting and caring for each other provide the backdrop for these successful corrective emotional experiences to occur.

The Group as Social Microcosm

ESDY have been shown to have low self-esteem relating from depression and anxiety due to behavioral problems in home, school, and work environments. (Sandler et al., 1991). Yalom (1995) states that they will inevitably act out these behavioral deficits before the group members in a way similar to these other social systems (p. 28). In this manner the group itself takes on the dynamic of the social systems and allows for group members to view their actions within this context and apply positive changes to this maladaptive interpersonal behavior.

In acting out these behaviors, group members shape the social environment of the group. This dynamic interaction occurs quickly and intensly in the wilderness environment due to the necessary verbal and physical cooperation that is needed to accomplish the simplest of tasks. As these behaviors become increasingly noticeable and overt, the group can begin to address them in carefully facilitated discussion. Applying the metaphor of the social system, the behavior can be traced back to systems where the individual had experienced problems before. Once seeing this connection, they understand the destructive capacity of this type of behavior. As stated earlier, behavioral problems in these environments drastically effect the academic and social development of young people. Providing an environment where these types of behavior are evoked and addressed in a constructive manner can have positive impact on their self perceptions.

Conclusion

It is concluded that treatment modalities associated with the therapeutic use of wilderness environments can help address multiple elements associated with characteristics of ESDY that lead to delinquency. The theoretical framework presented illustrates how a challenging and nurturing environment, a structured and supportive social system, and carefully timed and facilitated group discussions can provide opportunity for accurate therapeutic assessment, self expression, honest and healthy relationships, and personal growth. Table 6 summarizes theories of how wilderness experience can contribute to personal growth and presents how therapeutic factors of group counseling are integrated into the two main constructs of DOS and DOC. This enhances the two constructs and frames the study to test how wilderness works for ESDY. It is important to note there is evidence supporting placement of the therapeutic factors in either construct. Due to the dynamic nature and inter-relatedness of the DOS and DOC constructs, therapeutic factors have been placed in terms of which construct they would more strongly impact.

Table 6. Summary of theories of how wilderness experience can contribute to personal growth and therapeutic factors of group counseling integrated into two main constructs of DOS and DOC

Theoretical Understanding of Wilderness Experiences	Key Concepts	Therapeutic Factor
Development of Self	• Restorative Aspects of Nature • Wilderness Experience as a Ritual Rite of Passage	• Altruism • The Corrective Emotional Experience
Development of Community	Social Skill Development	Instillation of Hope
	Peer Relationships and Acceptance	Universality
		Corrective Recapitulation of the Primary Family Group
		Development of Socialization Techniques
		Group as a Social Microcosm

Chapter 5. Wilderness Discovery

Before research questions and methods are presented in this paper, it is first important to understand the objectives and key concepts of Wilderness Discovery, a wilderness experience program for ESDY specially designed for Job Corps students. The objectives of Wilderness Discovery are presented with a brief description of the "soft skills" approach and philosophy, including a model typical seven-day Wilderness Discovery program.

Wilderness Discovery Objectives

The initial objectives of the Wilderness Discovery (WD) program were as follows:

1. To help individuals improve self-esteem and awareness by applying and expanding the Job Corps social skills curriculum in a wilderness living situation, thereby providing opportunities for students to experience multiple successes through a program of learning, cooperation, communication and sharing.
2. To teach basic wilderness skills so students could live and travel in balance in nature and with each other in a natural environment. The lessons learned in Wilderness Discovery have the potential to become life-long leisure skills.
3. To enable students, through journaling, individual and group processes, to clarify their current situations, patterns, personal identity and roles in society, thereby creating opportunities for new visions and possibilities for success and achievement to emerge.
4. To help each individual develop a personal action plan for completing the Job Corps program, securing employment and movement toward her or his goals

and a more productive and rewarding role in society. In short, develop some kind of vision to help guide them through Job Corps and beyond.

5. To create a data base from which the Wilderness Discovery contributions to subsequent success of participants in the Job Corps and later life could be assessed.
6. To provide a quality wilderness experience for economically disadvantaged youth who normally lack such opportunities, including exposure to new life experiences and increased awareness of the environment.
7. To gain experience operating Wilderness Discovery for its refinement and potential future adoption at other Job Corps Centers, to help make Job Corps more effective.

Working with the Job Corps staff we planned and operated 7- or 8-day wilderness backpacking trips during the summers of 1993-1995. We started with an eight-day program, but for logistical and administrative reasons reduced it to seven-days (to allow gear and equipment to be unpacked and cleaned, to repack the next trip, and to give WD leaders and assistants the four-days off per two-week time period.

Approximately a week in advance of a trip, sign-up sheets were distributed to each of the student residential dorms. At the next steering committee meeting students were identified by dorm, vocational training, length of stay at Job Corps, age, gender, and race. Students were also identified as to their role on center--specifically their behavior problems, whether or not they were assigned to the substance abuse program, their participation in student activities and functions and so forth.

Our purpose was to make the Wilderness Discovery program available to the broadest possible range of students. To select WD participants, members of the steering committee conducted a round-table discussion with each member providing appropriate input on each student volunteer, ultimately reaching a relative consensus on students to participate on the next Wilderness Discovery trip.

Soft Skills

In the development and implementation of Wilderness Discovery we emphasized a "soft skills" approach to individual and group processes, focusing on helping students expand their insight and reflection on and evaluate their patterns of behavior, values, beliefs, and motivations. Soft skills can be defined as

> Soft skills, the interpersonal, people skills of outdoor leadership, can be divided into social, psychological, and communication components. Social soft skills incorporate group welfare and participant interaction, whereas psychological soft skills relate to to the participant's behavior and presence of mind. On the other hand, communicative skills combine verbal, written, and other nonverbal transmission and exchange of information (Phipps and Swiderski, 1990, p. 223).

Defining soft skills is difficult because the concept is complex. Maintaining the harmonious relations between all members of a wilderness experience program can have serious ramifications as to the safety and goal attainment of a wilderness experience program. Yalom (1995) makes a strong case for understanding the importance of soft skills when he states:

> The [wilderness experience program] is the epitome of the dynamic small group. Knowledge of how groups function and dysfunction is basic to environmental behavior, personal growth, safety, and in many instances the acquisition and functioning of technical motor skills. Group problem solving is essential [wilderness experience programs] (p. 15).

In focusing a program on soft skills, participants learn to understand the complexities of small group dynamics and how their behavior effects these dynamics.

We designed WD as a low risk, low stress, soft skills program featuring modest physical effort and emphasis on opportunities for attunement to nature, reflection, cooperation and sharing through community circles and joint responsibility for basic backpacking chores like cooking and cleaning. The focus was designed to emphasize success and cooperation because, typical of youth at risk, Job Corps students are likely to have experienced more failure and conflict in their lives than success and cooperation.

Individual activities like alone time, reflection, and writing in journals, and group activities like community circles, team problem solving, and shared responsibilities for both individual and group safety provide students multiple opportunities to make discoveries about themselves, each other, and the wilderness. As participants acquire new insights into themselves, each other, and the wilderness, they also discover multiple opportunities to apply their insights. In other words, the discoveries are often immediately relevant.. This is in contrast to a "hard skills" approach that could emphasize competition, control, aggressiveness, vigorous exercise, and risk, real or perceived. In one of the few literature references to "soft skills" Phipps & Swiderski (in Miles & Priest, 1990) define soft skills as follows:

For ESDY in the Federal Job Corps Program we believe soft skills represent the most appropriate approach to a wilderness experience. Wilderness Discovery is designed to help students experience success in completing a new activity, to slow down the pace of Job Corps and get "in touch" with themselves, other Job Corps students, and the natural world around them. Such an approach leads to skills and cooperation students can effectively utilize in their individual efforts to succeed in Job Corps and their eventual return to society

A Typical Seven-Day Wilderness Discovery Experience

Every trip was somewhat different because of the different mix of students, the area visited and often the weather. Additionally, while ESDY more-or-less share many characteristics, they still bring their individual experiences, beliefs, attitudes and expectations to the wilderness experience. The literature gives credence to the idea that the personality, training, philosophy, expectations and experience of the trip leader also influences the range of possible wilderness experiences (e.g., Ewert, 1989:45; Miles & Priest, 1990). Nevertheless we were working to establish a consistent program routine, procedures emphasizing safety and a soft skills approach, knowing that there would be inherent variation based on different conditions and individuals involved in each trip.

Wilderness Discovery trips were designed to provide Job Corps students a relatively consistent wilderness experience, thus the "routine" of each trip was as similar as possible. This helped to ensure that the data gathered could be compared across trips. Wilderness Discovery trips generally consisted of a short hike from trailhead on the first day. The second day consisted of an all day (6-8 hour) hike of about five miles (enough to burn off excess energy), followed by. a layover day on the third day. Day four featured another day-long hike, with a second layover day for day five. Day six was another all day hike to a location about an hour away from the pickup point.. On day seven the group completed its hike to trailhead where equipment was sorted and inventoried, exit-interviews were conducted, a closing group circle was held to finalize preparation for the return to the Job Corps center.

Because Wilderness Discovery was designed to facilitate a "soft skills" approach to accommodate other activities besides hiking, the total backpacking distance covered for each trip did not exceed 25 miles, though many students logged additional miles during day hikes on the two layover days.

Chapter 6. Research Questions to Test How Wilderness Works for ESDY

Introduction

Research questions associated with the development of self (DOS) and the development of community (DOC) are presented in this section. Key concepts within each construct are briefly reviewed followed by the research question that was generated from initial analysis of Wilderness Discovery data. Research questions within the development of self construct was developed through the work of Randall Pitstick (1996) in his dissertation entitled *The Meaning and Effects of a Seven-Day Wilderness Experience Program for Youth-at-Risk in the Federal Job Corps Program*, as well as the work of Keith Russell (1996), in his Masters thesis entitled *Potential Social and Economic Contributions of Wilderness Discovery as an Adjunct to the Federal Job Corps Program*. The development of research questions and initial analysis of data constitute Phase I of this study, with Phase II comprising the testing of these questions with accompanying analysis, results, and conclusions.

Development of Self

Within the DOS construct, two key concepts emerged which offer insight into how the wilderness works for ESDY. The restorative aspects of nature and the wilderness experience as a ritual rite of passage were found to influence the self concept of wilderness experience program participants. Each construct is briefly reviewed with an accompanying research question.

Restorative Aspects of Nature

In the development of the self, the wilderness as a restorative environment offers cognitive quiet, room for reflection, and opportunity for restoration realized by "soft fascination" (Kaplan and Kaplan, 1989). Clouds, streams, sunsets, wildlife, or a stream cascading down a mountainside—these scenes hold attention but in an undramatic fashion. Some fascination is so powerful that one cannot think of another concept or idea at the same time. Soft fascination, by contrast, permits a more reflective mode. It is this mode that allows the individual to reflect on their lives, relationships, goals, and dreams

Kaplan (1978) believes that restoration derives from the reduction of stimulus and arousal due to natures calming effect which elicits positively toned emotional states and blocks out negatively toned feelings. Nature removes individuals from their accustomed culture and surrounds them with a natural world that is very calming and nurturing. The impact this has on emotional states and thought processes can be very positive, and indeed, restorative.

Research Question 1: What effect did the wilderness environment have on the emotional states and thought processes of Wilderness Discovery participants?

Wilderness Experience as a Ritual Rite of Passage

Due to the very nature of wilderness experience programs, the opportunity to participate in a ritual rite-of-passage is provided by simple and practical day-to-day activities. In this way, a wilderness experience creates an environment suited for an archetypal rite of passage for individuals—an opportunity to participate in an ancient method of personal transformation that has the potential to operate quickly, mysteriously, and powerfully (Kimball and Bacon, 1993).

Helping participants process what it is they have learned on the wilderness experience and how it relates to their every-day lives is a difficult task. Many wilderness experience participants feel anxiety, depression, and apprehension from anticipating returning back to the dysfunctional environments from which they came (Pitstick, 1995). This mirrors the apprehension felt by adolescents upon entering into adulthood. This process mirrors the ritual rite of passage and helps validate for adolescents the difficulty they are experiencing in entering the adult world.

Research Question 2: What new or renewed sense of vision or commitment to a future path did students express upon completion of Wilderness Discovery?

Development of Community

Two key concepts were uncovered in Phase I of the study and which were reinforced in the literature concerning how wilderness experience programs can work in the development of community (DOC) for ESDY. They are social skill development and peer relationships and acceptance.

Social Skill Development

Research has shown that socially manipulative and coercive behaviors and pro-social skill deficiencies are related to disruptive and antisocial behavior (Mathur and Rutherford, 1994). Delinquent behavior is often a manifestation of social skill deficits (Freedman et al., 1978), and faulty learning proceses, and can be changed by teaching alternative pro-social behaviors (Gaffney and McFall, 1981). ESDY can enhance their likelihood of success an acceptance in society by learning appropriate and effective social behaviors that are necessary for independent living.

Hendee and Pitstick (1993), building on previous work done by Hendee and Brown (1988), state in their exploration of how wilderness works for personal growth, that people begin to socialize in different ways, where status differences dissolve, and candid interactions and sharing occur. Kaplan and Kaplan (1983) call this sense of integration, wholeness, and belonging to a holistic system *cohesion*. Jung (1933) and other transpersonal theorists emphasize the spiritual aspects of coherence in restorative environments as well. These processes are possible due to the cooperation and trust that is required on a wilderness experience trip.

Research Question 3: What social skills or lessons have Wilderness Discovery participants learned on the wilderness experience they will bring back to their every-day lives to improve their well being?

Peer Relationships and Acceptance

It is widely accepted in the social development literature that peer relations make unique contribution to social and emotional development (Berndt and Das, 1987; Burhmester, 1990). The constructs of peer acceptance and friendship are two aspects of peer relations that have been studied most extensively, and it is recognized that both play a significant role in the development and maintenance of self-esteem and interpersonal skills (Bishop and Inderbitzen, 1995).

Through a variety of day-to-day activities while on the program, participants are encouraged to work together to get a myriad of things accomplished, from cooking dinner, to setting up their tarps. Students are also taught that when conducting activities while in the wilderness, the group is only as strong as its weakest member. This instills an ethic that encourages them to help others in times of need. This lesson is difficult for many adolescents to comprehend due to individual survival techniques developed and mastered to persevere in their dysfunctional environments. Getting to know peers in a wilderness setting allows them to break down stereotypes and practice their social skills in a non-threatening environment.

Research Question 4: What evidence is there that Wilderness Discovery participants exhibit more functional social behavior which allows them to develop friendships and make new acquaintances while on Wilderness Discovery?

Chapter 7. Research Methods: Testing How Wilderness Works for ESDY

Introduction

Data was collected and analyzed during the two-year pilot program and study in four phases. The first phase was completed by Randall Pitstick (1995) in his dissertation entitled *The meaning and effects of a seven-day wilderness experience program for youth-at-risk in the fedral Job Corps program,* which consisted of an intense grounded theory analysis of student journals (see Figure 2 for time line). The second phase consisted of analyzing the focus group responses. This was conducted by Russell (1996) in his Masters project. The third phase was analyzing the exit-interview responses in the Summer of 1996, which was also done by Russell (1996). The final phase of data analysis for testing the framework presented in this study was completed in the Spring of 1997. Different research questions were addressed which required revisiting the data and taking a "fresh look" at the responses. The following is a review of the data collection and analysis procedures performed.

Table 7. Data Analysis Time Line for Wilderness Discovery

	1994		**1995**		**1996**	
Phase	**June**	**September**	**June**	**September**	**June**	**September**
Phase I Randall Pitstick (1995)	—	—	—	→		
Phase II Keith Russell (1996)			—	—	→	
Phase III Keith Russell (1996)		—	—	—	—	→
Phase IV Keith Russell (1997)						—

Phase I. Randall Pitstick (1995) grounded theory analysis of student journals
Phase II. Keith Russell (1996) content analysis of focus group responses
Phase III. Keith Russell (1996) content analysis of exit-interview comments
Phase IV. Keith Russell (1997) content analysis of journals, exit-interviews and focus group responses

Student Journals

Students were given journals and asked to keep a record of their experience during the seven-day back-packing trip. We gave them time during layover days and after meals, when they could think about pressing issues in their lives and record their thoughts. We found that students with higher reading and writing abilities were more comfortable in their writing and reflections on the experience, and thus wrote more words and reflective comments. Other students focused less on the journals, but revealed rich insights about their experience through the exit-interviews.

There are other important variables to be considered when analyzing student journals. They are: varying styles of leadership within the framework of WD protocol in creating structured time for journal entries; weather and trail conditions making travel difficult, and thus, making time an important factor; social dynamics of the group; and, time of year, with trips earlier in the season more difficult with bugs and extreme weather than those later in the season. These factors can individually or collectively play a role in providing a suitable environment for quality journal writing.

There were two approaches used to analyze the rich data recorded in the journals. The first was to conduct an intense analysis of the content of the journals using a grounded theory approach to address the question of: *What are the meanings of participating in a Wilderness Discovery experience from the perspective of the students, based on analysis of journals*. In his dissertation, Randall Pitstick (1995) addressed this question in great detail using qualitative analysis of journals from the six trips during the 1993 feasibility study leading to grounded theory of how the wilderness works in providing meaning to Job Corps students during the Wilderness Discovery experience.

For the subsequent two years, 1994 and 1995, a second approach was used to gather quantitative information on the number of words written and the number of "reflective comments" made per-student per-trip based on the 30 additional Wilderness Discovery trips. Reflective comments are defined in this study as any statement or phrase which relates the experiences of Wilderness Discovery to their role at Job Corps or in their every-day life. Common themes were also identified and found to be similar in most cases with those analyzed by Pitstick (1995) using a grounded theory approach.

Exit Interviews

At the conclusion of every Wilderness Discovery trip, each student responded to questions about their Wilderness Discovery experience in a private recorded interview. The interview was one-on-one with the leader and took place at the trailhead immediately following the conclusion of each trip. We wanted to hear the story of their experience and what they had learned when it was still fresh in their minds and hearts.

The interview was later transcribed and descriptive statistics were tabulated for interview items having objective responses--such as yes or no. Any responses that were narrative were content analyzed to identify consistent themes and then analyzed across centers using cross tabulations to search for patterns. The interviews elicited rich insight into the student's experience and were invaluable as a tool to evaluate the strengths and weaknesses of Wilderness Discovery.

Youth-at-risk are experienced in manipulating direct-interviews in a way that can bias results. Often times, they will tell you what you want to hear, aware of the direction and desired outcome of interviews. Despite this potential bias, the results are still very revealing.

The questions started broad, asking students if felt any different about themselves or the group members because of the experience. The interview then moved to more direct questions of what particular things had been learned on their Wilderness Discovery trip and how they planned to apply them to their lives at Job Corps. The objective responses combined with the content analysis of the narrative responses tell a story of pride in achievement through fulfilling a goal, new friendships, and a clearer vision of why they are in Job Corps and the possibilities for their future.

Focus Groups of Job Corps Staff

We wanted to determine what Job Corps staff thought about Wilderness Discovery. This was their opportunity to evaluate the program based on their observations and judgments about Wilderness Discovery student participants back on center. The logic of using WD Steering Committees to estimate the perceived effects is based on their qualifications as experts who could make rational professional judgments about what they perceive the program's effects to have been. They are professionals in working with youth-at-risk in Job Corps. They are also familiar with the students' histories prior to entering Job Corps and prior to participating in Wilderness Discovery and have the chance to evaluate changes in behavior, positive or negative, on center. Finally, such expert judgments are the basis for all operational and administrative decisions in Job Corps, so we wanted to test WD against that practical criteria.

In order to conduct content analysis, it is first important to prepare the data to be analyzed. This is done by converting the content into specific units of information that can be analyzed. Krippendorf (1980) describes three ways in which the data can be placed into units to be analyzed: sampling units, recording units, and context units. The sampling units are those areas that are part of the larger whole, where all the interaction that occurred within a particular topic is noted. The sampling units in this study were based on two main areas: (1) benefits to the students of Wilderness Discovery as a program; and (2) benefits to students of Wilderness Discovery as a program according to questions based on the six critical variables in the Mathematica (1985) model.

The statements recorded under the theme of these two main areas were the recording units. A recording unit represents specific statements within the broader sampling unit (Yin, 1989). These recording units were written in the margins of the large sheets of paper during the focus group process and were later placed into the computer. It was at this time that the recording units were analyzed and coding was employed to begin to look for patterns and categories to emerge from the data.

The analysis of the data was broken down into two main areas: (1) the first sampling unit was based on analyzing the question of the benefits to students who participated in Wilderness Discovery as compared to non-participants, to see if the categories or patterns emerging from this broad, open-ended question could be used later in the analysis; and (2) the second sampling unit was concerned with analyzing the responses to the questions of how the benefits to the students, as perceived by Job Corps staff, related to the six critical variables in the Mathematica (1985) model.

The first step was to review the recording units, placed in a table for each center, in order to become familiar with the data. Stewart and Shamdasani (1993) state that the analyst will gain greater insight into the content of the discussions as the coding exercise may require reviewing the transcriptions several times. Within the first sampling unit, after many passes through the recording units, categories began to emerge. Categories can be defined as a "classification of concepts, where the concepts are compared one against another and appear to pertain to a similar phenomena" (Strauss & Corbin, 1990, p. 61).

As these categories or themes emerged, notes were made in the margins as to the emerging ideas embedded in the phrases. This was done for the first sampling unit (benefits to the students of Wilderness Discovery) for each of the four centers. These categories evolved into themes which would be used to help analyze the second sampling unit. These categories were then compared across centers to check for similar phenomena emerging from the four centers and to see if a central core phenomena emerged from the data. Similar ideas across all four centers began to emerge, and it was determined that the next phase of the analysis could begin, using the emerging categories as a guide to begin analysis of the second sampling unit.

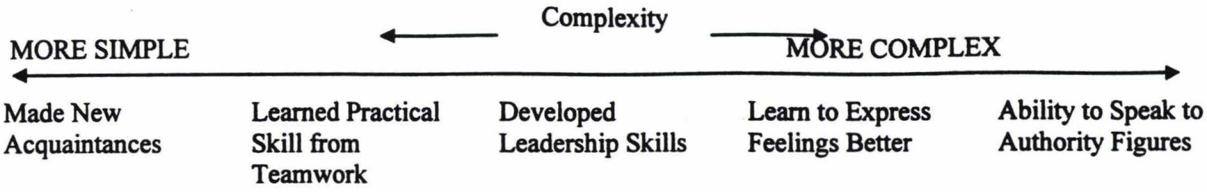
It was then possible to compare the emerging categories across all four centers and look for consistencies. After many passes through the data, a new table was generated using the consistent categories across all centers, and the phrases were placed into the table (see Table 8).

Table 8. WD Steering Committee members reasons supporting benefits to students from participating in Wilderness Discovery by categories across centers.

Benefit Category	Case 1:Curlew	Case 2:Trapper Creek	Case 3:Atlanta	Case 4:Timber-lake
Accomplishment	Students realized they had more capability than thought-sense of accomplishment	- Sense of accomplishment - Realize importance of experience	A sense of accomplishment	Self-esteem from accomplishment
Appreciation/ Exposure to New Experience	Opportunity to experience something they would have missed	Learned camping skills and wilderness travel	Exposure to an outside and different experience	Developed new leisure skills
Challenge	Stretch comfort level	Learn about their limitations and interests		
Communication	Ability to speak to authority figures	Learn practical skill from teamwork	Learn to express feelings better	- Made new acquaintances - Developed leadership skills
Reflection/ Introspective	-Opportunity to reflect on and deal with personal issues	Ability to be introspective and reflect	Neutral environment to confront personal issues	Gained insight into themselves and other students
Self-Confidence	Self-confidence and peer acceptance	Increased participation and enthusiasm-More confident	Self-Confidence	Sense of confidence
Self-Esteem	Self-esteem-ability to speak up for themselves	Learn respect for themselves and each other		Self-esteem for accomplishment
Teamwork/ Cooperation	- Opportunity to help others - Male and female on equal footing - Other students seen in a different light	Learn practical skill in teamwork	- Opportunity for sharing and caring for each other - Learn the importance of teamwork - Learned acceptance of others	- Enhanced trust in themselves and others - Developed leadership skills
Trust/Respect for Authority Figures	Increased maturity; "More human"	Learn respect for the wilderness and each other	- Respect the staff more - Openness to others	Enhanced trust in themselves and others
Wilderness/Env. Awareness		Awareness of wilderness as a positive experience		Enhanced env. and wilderness awareness

The categories were then subdivided according to a complexity continuum (more simple to more complex) to explore and illustrate the full meaning of the phrases suggested by the focus groups. Figure 2 illustrates the spectrum of complexity for the Benefit Category, Communication.

Figure 2. Dimensions of complexity for the benefit category Communication


Complexity
MORE SIMPLE
MORE COMPLEX
Made New Acquaintances
Learned Practical Skill from Teamwork
Developed Leadership Skills
Learn to Express Feelings Better
Ability to Speak to Authority Figures

For example, the phrase “made new acquaintances” is a fairly simple form of communication, referring to the students talking to students they normally would not and is seen as a good start in developing social skills for many Job Corps students. Here the students are moving away from peer acceptance and social standards of who is “cool” and “OK” to talk to, and communicating with other new acquaintances with whom they feel comfortable. Hence, the placement of the “made new acquaintances” phrase on the simple end of the complexity continuum.

On the other hand, increasing students ability to speak to authority figures illustrates communication at a more advanced level, which could have important positive impacts on getting and holding a job in the future. Thus, it was placed on the more complex end of the spectrum. Other benefit categories contain similar phrases placed on the complexity spectrum to better describe the benefits perceived by staff and give the benefit category relative magnitude.

Chapter 8. Results

Introduction

Each research question will be addressed with data analyzed from student journals, exit-interviews, and focus groups responses of Job Corps staff. Triangulation will be used to build a hierarchy of evidence linking responses made by students and staff concerning Wilderness Discovery to the respective research question. Data will be presented with a subsequent discussion after each data source (journal entry, exit-interview response, or focus group phrase) to further illustrate the meaning of the data. Marshall and Rossman (1989) write

> Triangulation is the act of bringing more than one source of data to bear on a single point. Designing a study in which multiple cases are used, multiple informants or more than one data gathering technique can greatly strengthen the study's usefulness for other settings (p. 146).

In this study, multiple forms of data were used an analyzed according to the operationalized research methods aforementioned. This included multiple informants and multiple sources of data. When reporting quotes from student journals, no effort was made to change spelling, grammar, or punctuation. The story the students tell is theirs and is done in their own words. Anonymity of all subjects was maintained using a detailed response coding procedure with all references to any individual, place, or event which could trace the quote back to a student being removed to ensure complete anonymity.

Research Question 1: What perceived effect did the wilderness environment have on the emotional states and thought processes of Wilderness Discovery participants?

Student Journals

Once the van leaves the trailhead, the students realize that the next seven days in the wilderness has just become a reality. Speaking from personal experience as a trip leader, you can see them gaze at the grandeur of the setting and take an inventory of their immediate surroundings. The first two days are spent adjusting to life on the trail and getting over the initial anxiety of the experience. The following comments reflect their attunement to the wilderness surrounding and the impacts it is having on their thought processes and emotional states.

> My soul finds peace as the night closes its eyes to rest. My heart finds joy and happiness, and I am starting to feel young again. It feels so good not to stress on what is happening around me! 86-16-19

> [Three of us*] had an interesting talk today. We talked about how beautiful life is living this way. While we all fight in society and create a lot of ugliness and hatred, making our lives and everyone elses complex, when there are so many people who would rather live simple. 56-6-10

> [Two of us] got up early in the morning and took a hike up to the top of the hill I seen some land before but I never saw anything like it the sky was blue as my bandana. the trees were taller then sky scrapers. the wind sounded like it was talk to me. You could stand up there and for get about everything in the world. 102—26-31

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* Bracketed words are used in place of student names

As I'm looking down across the valley today, I can't help but think how lucky we are to be able to see everything that no one else can't see. The sun is finally coming up it is so beautiful. (Just image a place with no people, all of you here is birds singing and hear the wind blow. Well I found that place, it is right here in front of me. This is trulely heaven in the outside world) 38—25-32

Well today we went on a tremendus day hike that streched from the camp to the top of the sadel. How should I decsibe every thing I saw. Butt when I was up on the peak I felt a very large bird, Eagle. The view tremendus montans and trees for miles around. Then I saw some tremendus rock formations. Butt I think the most enjoyeble experinxe was get to know your self in nature along with others. 105—1-8

I think part of the reason it has been so easy today because the most stress I have had out here is deciding if I should stop for a break, drink a glass of water or eat some trailmix! In the distance the clouds float, my mind, my heart they fly! 57-22-26

I want to be totally away from society. I want to forget about where I was three days before and only think about the wilderness right here right now. 87-20-22

It seemed like everyone is beginning to miss the corps for some odd reason. I went for a hike alone to enjoy the silence and woodlands. 15-33-35

One thing about this trip is that I really needed it. I can feel the stress being released a little more. I have been letting it build to where verything makes me angry. Even little things that normally would not bother me. 87-4-7

Exit-Interviews

The question *What are the most important benefits to be gained from visiting the wilderness?* asked students to explore how the wilderness affected their moods, thought processes, and genera well-being. For Job Corps students, it gave them a chance to articulate, based on their wilderness experience, (the first for most of them), what is to be gained from spending periods of time in wilderness environments. What would an experience in pristine, natural conditions of wilderness lead to in benefits to the participant from their point of view? We wanted to explore this question from the perspective of young people at-risk, and their responses were truly revealing. Table 9 presents the themes which emerged from the narrative responses to the question: What are the most important benefits to be gained from visiting the wilderness.

Table 9. Responses to the question of: What are the most important benefits to be gained from visiting the wilderness

Categories	Number responses from all centers (Percent)
Get away from the stress of every-day life/Experience peace and quiet	97 (35%)
Learn respect for nature and other people	84 (30%)
Lot of time to think about your life/Get to know yourself	31 (11%)
Learn to appreciate things/Not to take things for granted	29 (10%)
A chance to learn something new/Learn to care for the wilderness	24 (9%)
Others	11 (5%)
Total	276

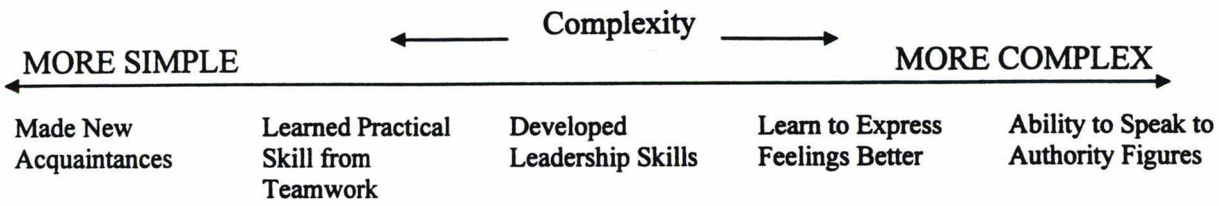
Students revealed that wilderness allows people an opportunity to remove oneself from the hustle and bustle of everyday life. Getting away from the stress of Job Corps and experiencing true peace and quiet was the primary benefit to 35 percent of WD participants. Slightly less, about 30 percent, noted that the wilderness teaches respect for the natural world as well as respect for others, a metaphor emphasized in WD. Having time and an environment in which to reflect on their role in Job Corps and their lives was seen as a benefit to 11 percent of participants, while 10 percent stated that wilderness taught them to appreciate what they have in their lives, and the beauty found in nature. And finally, 9 percent of WD participants pointed out that wilderness offered an experience that they could learn from--learn about nature, other people and most importantly, themselves.

Responses by students to this question were very positive, illustrating the work of WD leaders in articulating the meaning and power of the wilderness to Job Corps students was well received. The ability of students to apply the wilderness as a metaphor to issues relevant to their lives describes an advanced form of comprehension. This comprehension of the benefits of wilderness by students is perhaps the ultimate form of piecing together what the Wilderness Discovery experience is all about. The experience is about peace and quiet, respect, reflecting, appreciation, and learning.

Focus Groups

Each benefit category is presented and discussed as to how it was expressed by WD Steering Committee focus groups at each center. The central criteria for a category to be established was consistency of consensus phrases between at least two of the focus groups. The categories were then subdivided according to a complexity continuum (more simple to more complex) to explore and illustrate the full meaning of the phrases suggested by the focus groups. For example, Figure 3 illustrates the spectrum of complexity for the Benefit Category, Communication.

Figure 3. Dimensions of complexity for the benefit category Communication


Complexity
MORE SIMPLE
MORE COMPLEX
Made New Acquaintances
Learned Practical Skill from Teamwork
Developed Leadership Skills
Learn to Express Feelings Better
Ability to Speak to Authority Figures

For example, the phrase "made new acquaintances" is a fairly simple form of communication, referring to the students talking to students they normally would not and is seen as a good start in developing social skills for many Job Corps students. Here the students are moving away from peer acceptance and social standards of who is "cool" and "OK" to talk to, and communicating with other new acquaintances with whom they feel comfortable. Hence, the placement of the "made new acquaintances" phrase on the simple end of the complexity continuum.

On the other hand, increasing students ability to speak to authority figures illustrates communication at a more advanced level, which could have important positive impacts on getting and holding a job in the future. Thus, it was placed on the more complex end of the spectrum. Other benefit categories contain similar phrases placed on the complexity spectrum to better describe the benefits perceived by staff and give the benefit category relative magnitude. The following coded focus group responses offer insight into Research Question 1: *What effect did the wilderness environment have on the emotional states and thought processes of Wilderness Discovery participants?*

Appreciation/Exposure to a New Experience

Four centers noted that Wilderness Discovery provided "a new experience" for many students, which led to the acquisition of skills which they would not otherwise had an opportunity to develop. Table 10 contains four excerpts by each center placed into the Appreciation/Exposure to a New Experience category with its associated dimensions of complexity.

Table 10. Responses by WD Steering Committee focus group participants grouped in the Appreciation/Exposure to a New Experience benefit category, ranked from more simple to more complex.

	Job Corps Centers			
Benefit Category	**Case 1:Curlew**	**Case 2:Trapper Creek**	**Case 3:Atlanta**	**Case 4: Timberlake**
Appreciation/ Exposure to a New Experience	Opportunity to experience something they would have missed	Learned camping skills and wilderness travel	Exposure to an outside and different experience	Developed new and different leisure skills

MORE SIMPLE ←→ MORE COMPLEX

Exposure to Outside and Different Experience	Opportunity to Experience Something They Would Have Missed	Learned Camping Skills and Wilderness Travel	Developed New Wilderness Travel Leisure Skills

The benefits of an experience that is new and foreign to the students, with the accompanying learned skills and knowledge, was noted across all four centers. ESDY are hesitant to try new things, because many are afraid of failure. Things that are new and different pose a threat, often being passed over for what is comfortable and routine. The exit interviews revealed that 91 percent of the students who participate in Wilderness Discovery have never been backpacking before. Of those, 97 percent state they have never been presented the opportunity.

At the more complex end of the spectrum is the idea that students are learning new leisure skills, many of which they can practice in regions where they live. Showing the students how to live and recreate in a different way empowers them to look for alternative leisure skills. It also shows them that they can try something new and succeed at it. Any success the students can have in life is a big step toward empowering them to live a better and healthier life.

Reflection/Introspection

The opportunity for students to reflect on their lives and be introspective was noted by three centers as a benefit of Wilderness Discovery to participating students. This idea is a one of the primary goals of Wilderness Discovery--to allow students to think about their lives and the role that Job Corps plays in helping students realize their goals and aspirations. Table 11 presents the three excerpts placed into the reflection/introspection category with the dimensions of that category, followed by their dimensions of complexity.

Table 11. Responses by WD Steering Committee focus group participants grouped into the Reflection/Introspection benefit category, ranked from more simple to more complex.

	Job Corps Centers			
Benefit Category	**Case 1:Curlew**	**Case 2:Trapper Creek**	**Case 3:Atlanta**	**Case 4: Timberlake**
Reflection/Intro-Spection	- Opportunity to reflect on and deal with personal issues - Neutral environment to confront personal issue	Ability to be introspective and reflect on their lives	----------------------	Gained insight into themselves and other students

MORE SIMPLE		MORE COMPLEX
- Opportunity to Reflect on and Deal with Personal Issues - Ability to be Introspective and Reflect	Neutral Environment to Confront Personal Issues	Gained Insight into Themselves and Others

One of the primary goals of Wilderness Discovery was to give the students an opportunity to get away from the stress and highly structured environment of Job Corps. In doing this, the students consider changes they are making in their lives and decisions facing them in the near future. Job Corps is a transitional program, offering students a chance for a better life. If they have an opportunity to reflect on the benefits they are receiving from Job Corps, they could be more likely to stick it out in times of difficulty. Reflection on personal issues by the student's helps them think about why they are in Job Corps and what they want to do with their lives.

On the more complex end of the spectrum, gaining insight into themselves and other students sheds new light on the power of reflection and introspection. This statement implies that, upon reflection, students have realized something new about themselves or other students. Students gaining "insight" into decisions made in their lives is a powerful concept for looking at both positive and negative choices they have made. Students realizing they have made bad decisions and experienced failures can become dangerous to themselves and others. These feelings and actions are constantly monitored in wilderness experience programs, as the wilderness can bring out powerful feelings that have been suppressed for years. On the positive side of insight lies the world of self-renewal and self-discovery. Students presented with a success metaphor realize they can do and complete things they previously did not believe possible. Thus, valuable insights into themselves can be brought back to Job Corps and into their lives to be used as a positive tool for renewal and guidance when tough decisions and circumstances confront them.

Wilderness and Environmental Awareness

Two centers noted that students benefited from Wilderness Discovery by enhancing their wilderness and environmental awareness. Table 12 presents the comments made by WD steering Committee staff relating to the theme Wilderness and Environmental Awareness, followed by dimensions of complexity.

Table 12. Responses by WD Steering Committee focus group participants grouped into the Wilderness and Environmental Awareness benefit category, ranked from more simple to more complex.

	Job Corps Centers			
Benefit Category	**Case 1:Curlew**	**Case 2:Trapper Creek**	**Case 3:Atlanta**	**Case 4: Timberlake**
Wilderness and Environmental Awareness	----------------------	Awareness of wilderness as a positive experience	----------------------	Enhanced environmental and wilderness awareness

MORE SIMPLE ←→ MORE COMPLEX

- Awareness of wilderness as a positive experience
- Enhanced environmental and wilderness awareness

Comments made by WD Steering Committees were placed on the middle of the spectrum in equal dimensions due to their similarities and potential impacts on the students lives. Having this awareness of wilderness and knowing it is there can bring satisfaction to students when they reflect back on the power and beauty of their wilderness experience. Environmental awareness benefits the students as well as society in the long run. Teaching the students to appreciate wilderness is a major goal of Wilderness Discovery.

Research Question 2: What new or renewed sense of vision or commitment to a future path did students express upon completion of Wilderness Discovery?

Student Journals

Helping participants process what it is they have learned on the wilderness experience and how it relates to their every-day lives is a difficult task for trip participants. Many wilderness experience participants feel anxiety, depression, and apprehension from anticipating returning back to the dysfunctional environments from which they came (Pitstick, 1995). This mirrors the apprehension felt by adolescents when struggling to define themselves as adults and enter into adulthood. Self discovery and bringing this "possible self" back to Job Corps with them is an exiting and frightening concept for participants to process. This process mirrors the ritual rite of passage and helps validate for adolescents the difficulty they are experiencing in entering the adult world. The following journal excerpts reflect this feeling of students having gone through an experience and are thinking about their return to Job Corps and civilization.

> Over this whole trip I learned many things about myself. One of the most important things I learned was that no matter how tough things are ahead of me it doesn't help to give up, but go forward and do my best. 39—17-20

> I am getting to know myself a lot better.
> I feel College, working, and marriage is alot considering my age, only being 17, but inside my heart, mind, and soul, has wanted and been ready for all these things to come. I'm becoming content with my future plans and in my life I plan to accomplish anything and everything I can get out of life! 10—18-24

So far I've figured out that Ive grown away from my religion a lot. Thats the one thing my mom told me never to do. In a way comeing here has helped me realize that maybe going back to my old ways isnt such a bad idea. 5—29-32

I am figuring out that I depend on [my boyfriend] too much and that I am capiable of doing things on my own. I don't always need [him] but it is nice to have him around. 80—6-9

I can't remember the last time I felt so good inside, I can't believe I feel this way, so now I must decide. I use to hate decisions and I couldn't stand to be confused, but no matter what I did before I got frustration. Now here I am at 19 years still just wandering along, looking for a way of life that I find good, pure and strong. 58—34-36; 59—1-3

I feel good and I made it I did better then I thought I could do there was so meny times I felt screeming for joy. 60—13-15

Well today was our lay over day. I walked down to the creek and had a lot of time to think. I did something today that I've been wanting to do for the last 5 years. I wrote a letter to my father not just any letter though. I wrote about the paine Ive been through all my life. I wrote him an asked why he molested me. my letter was like one big confrontation. I told him what it put me through and how it felt inside. I feel like a big weight has been lifted from my shoulders. for once I can finally feel at peace. 51—22-30

I'm tired of hateing the world and all the ugliness I see. I don't seem to find any beauty in life anymore. I see materialistic people, and they are proud of it. I want to be with people who are happy and at peace. people who have kind hearts. that's my kind of people. 86—19-23

I think so much about my family and all the terrible things I regret saying to them. I know it hurt them very much, especially my mom, but I would rather let them know how I really feel then for me to become as fake and as lonely as them.

Sometimes I only said them out of spite, but I think they are starting to understand me.

I think this trip helped me grow up alot and Ive seen that it as help the other guys a lot thats good. I feel tht this trip is going to help me for the rest of my life and the other gutys to. Ive learned more about friendship than I ever new. This is a wounderfule trip. 103—7-12

well setting around the camp fire were all excited about going back tomorrow none of us really want to but we know we have to. 44—28-31

Everyone is very ready to go back to work and just work as hard as I can to get out and start my life. 4—18-19

I can't wait to get back and tell my mom about this trip. I probably have a pile of mail waiting for me back at J.C. 8—22-24

To day is the last hike we have to do it is good to be on the last hike. but I do not like it because I have to go back to job core I love being out here I stopped smoking I feel good about myself. 20—25-28

We're leaving now. I feel sad in a way. I touch my hands to the window pane, wanting to feel the soft green leaves, to walk on a dirt path and be shaded from the sun by trees older than I. I want to feel the sharp coldness of a fresh, little stream and be wind dried by a cool breeze again. But I know I have to go back, I have to finish goals and plans that I've set for myself. I just hope that there will be something left for me to go back to and say "I was once a part of this place, I was here, and this place will always be a part of me." 70—10-19

today was very fun when I get back to center this will have taught me that I could do alot of things I didn’t think I coud do. 106—23-25

Exit Interviews

Applying metaphors of lessons learned on WD, like accomplishing a task they thought was impossible, can help students overcome adversity and see everyday challenges in a new light. The Wilderness Discovery program helps student re-enter Job Corps by talking about these lessons and metaphors in an open and non-threatening way with other students. The last night of the trip, an intense and often emotional "final group meeting" is conducted after dinner to discuss what they have learned on Wilderness Discovery and how these lessons can help them change their life path through completing their goals, such as finishing Job Corps and gaining employment. The exit-interview then helps students re-state these ideas, the premise being that the more students think about these lessons, the more likely they will apply them to their on-going training in Job Corps. Table 13 presents the responses to the questions *Is there anything you experienced on Wilderness Discovery that may carry over when you return to Job Corps?* A discussion of the major themes which emerged from content analysis of student narrative responses follow in Table 14.

Table 13. Responses to the question of: Is there anything you experienced that will carry over when you return?

	Job Corps Centers (1994-1995) (Percent)				
	Atlanta*	**Timberlake**	**Trapper Creek**	**Curlew**	**Average**
Yes	100	97	93	96	96
No	0	3	7	4	4
Total	100	100	100	100	100

***Data for 1995 only**

Table 14. Categories generated from content analysis to the question: Is there anything you experienced that will carry over when you return?

Categories	Number responses from all centers (Percent)
Be more open minded	90 (32%)
More confident and motivated--New attitude	68 (24%)
Accomplished something--can achieve goals now	47 (17%)
Take things less for granted—Appreciate what I have	24 (8%)
Other	47 (17%)
Total	276

Every day WD trips hold "circles" to see how the group is feeling, discuss the day's activities or hike, or as a "check in" tool, to discuss any problems the students might have with the leaders, other members of the group, or a pressing issue they would like to share. The student with the "talking rock or stick" speaks while all others listen to what that person has to say. This power symbol allows every person an opportunity to speak and be heard. Students feel comfortable in this setting, as trust and friendship among group members grows throughout the week of intense group interaction and wilderness living. Instead of judging their peers, 32 percent of the students said they would be more open minded about others comments or experiences. This finding was a pleasant surprise to Wilderness Discovery, as the Circle is an integral component of the soft skills approach.

Students come off the Wilderness Discovery experience feeling refreshed and exited to be back at Job Corps. As one student said, "I can't believe I would ever be so happy to see this place! (Job Corps)" Along with this enthusiasm, 22 percent of the students state they are more confident in themselves and have a new attitude towards their role in Job Corps. For many, this is the first time they have completed something as difficult and trying as Wilderness Discovery. The analogous ideas of completing Wilderness Discovery and then completing Job Corps is a metaphor that returning students can comprehend and act on. For many students, this is the final push they need to complete their training and enter the workforce.

Students also note that they have learned valuable lessons from the physical and mental challenges put forth by Wilderness Discovery. If they can climb an 8000 ft. mountain with a 40 lb. backpack with blisters in the rain, then normal every-day challenges do not appear as daunting. Students responded to the question with statements like, "If I can make that mountain when I wanted to give up, then I know I can complete Job Corps," or "I know when the going gets tough I can hang in there and get through it."

This sense of accomplishment can be a valuable tool for Job Corps staff back on center when facilitating a situation with a student. Reflecting on Wilderness Discovery, an accomplishment is only a memory away for that student. These revelations are a major step in helping students be more accountable for their behavior and how it affects those around them. It is this group dynamic that facilitates the awareness and eventually addresses aspects of students behavior that need attention.

Focus Groups

In understanding what new or renewed sense of vision or commitment to a future path students expressed upon completion of Wilderness Discovery, Job Corps staff offered interesting insight because their exposure to the students was after the trip returned. What staff noted was increased levels of self-confidence and self-esteem and a sense of accomplishment felt by students. In exploring these benefits noted by Job Corps staff, it is evident how these benefits relate to a renewed sense of what the future holds for them.

Accomplishment

Job Corps staff at four centers noted that Wilderness Discovery provided a sense of accomplishment for student participants. Table 15 shows the four excerpts by each center that were placed into the Accomplishment category with the properties and dimensions of that category placed on the complexity spectrum below the excerpts.

Table 15. Responses by WD Steering Committee focus group participants in the Accomplishment benefit category ranked from simple to more complex.

	Job Corps Centers			
Benefit Category	**Case 1:Curlew**	**Case 2:Trapper Creek**	**Case 3:Atlanta**	**Case 4: Timberlake**
Accomplishment	Students realized they had more ability than they thought-sense of accomplishment	- Sense of accomplishment - Realize importance of experience	A sense of accomplishment	Self-esteem from accomplishment

MORE SIMPLE ⟷ MORE COMPLEX

Realize Importance of Experience

Students Realized Had More Ability than They Thought

Sense of Accomplishment

For many Job Corps students, completing Wilderness Discovery may be the first time in their lives they have completed anything as difficult and challenging as a seven-day backpacking trip. The more simple end of the spectrum contains the phrase that the "students realized the importance of the experience." Realizing the importance of completing a task can affect students' confidence level in positive ways and help them "stick to it" when the going gets rough.

The more complex end of the spectrum contains clear statements that students have experienced a "sense of accomplishment." As previously stated, this may be the first time in their lives they have completed task as difficult and challenging as a seven-day wilderness experience program that has taken them completely out of their accustomed culture. Many students enter WD with a multitude of fears associated with living and traveling in the wilderness for seven days (Pitstick, 1995). Overcoming these fears and achieving the goals they have set for themselves is a significant benefit that WD can provide Job Corps students.

Self-Esteem

Self-esteem was noted across three centers. Table 16 presents the comments made by WD Steering Committees at three centers placed into the self-esteem category, followed by the dimensions of complexity for that category.

Table 16. Responses by WD Steering Committee focus group participants grouped into the Self-Esteem benefit category, ranked from more simple to more complex.

	Job Corps Centers			
Benefit Category	**Case 1:Curlew**	**Case 2:Trapper Creek**	**Case 3:Atlanta**	**Case 4: Timberlake**
Self-Esteem	Self-esteem-Ability to speak up for themselves	Learn respect for themselves and each other	----------------------	Self-esteem from accomplishment

MORE SIMPLE ⟷ MORE COMPLEX

Learned Respect for Themselves and each Other

Self-esteem from Accomplishment

Self-esteem; Ability to Speak up for Themselves

Self-esteem has been defined for this study as, "the degree to which one values oneself. Note that although the word esteem carries the connotation of high worth or value, the combined form, self-esteem, refers to the full dimension and the degree of self-esteem (high or low) is usually specified" (Reber, 1985, p. 168). Learning respect for themselves was placed on the low end of the spectrum, because learning to respect oneself is a good start for ESDY in increasing their self-esteem.

Many Job Corps students have a difficult time speaking to authority figures and their peers in a respectful manner. The WD Steering Committees perceive Wilderness Discovery benefiting the students by enhancing their ability to speak up for themselves. Typically, when Job Corps students have a problem with someone or something, they hold it in and don't talk to anyone about it. Their problems can build and surface at the wrong time and place and lead to emotional outbursts (Navarro and Associates, 1990). Learning to talk to authority figures and their peers about their problems could help the students learn to help themselves. Wilderness Discovery strives to create a neutral and trusting environment for this to take place.

Research Question 3: What skills or lessons have Wilderness Discovery participants learned on the wilderness experience they will bring back to their every-day lives to improve their well being?

Student Journals

Therapeutic benefits reported in the literature from participation in a wilderness experience program include reduced recidivism, significant positive changes in self-concept measures, reduced frequency of deviant behaviors, improved locus of control, fewer arrests, improved social skills, and greater cooperation (Pitstick, 1995). These benefits suggest that participants are returning from the wilderness experience with new coping skills enabling them to better their lives. There are few long term studies, with most studies consisting of pre- and post trip questionairres, and in very few instances were long term follow-ups completed (Friese et al., 1996). Schreyer, Wiliams, and Haggard (1990) suggested that a need exists to focus more on the benefits of long term participation.

To address these concerns, understanding personal and interpersonal skills development is of great importance to begin measuring and isolating skill development in the long run. Because of this we wanted to explore which skills were being learned to help socially and economically disadvantaged youth operate in the home, school, peer, and work environments in which they have exhibited a history of dysfunctional behavior. The following journal entries exhibit comments which suggest a skill or a new way of being which has been learned on the experience.

> The wilderness cleanses me and makes me healthy again. All of the vices I cling to in civilization don't do me any good. Being out here shows me how mortal I am and I shouldn't continue to damage my body once I get back to Job Corps. 12—3-7

> I felt really proud of myself. I had a great time to all of you people who doesn't like do that kinda of stuff try it you'll feel better and proud that you finished it feels great it helps get your mind off things like your troubles and problems your having I had alot of problems and when I went on the wilderness trip and when I finished I felt a who lot better towards myself and others. 83—19-25

> If the world we live in doesn't open it's eyes we will never survive. If we don't see what it means to be alive we will never survive. All of the world needs to come out here in the woods to see what it truelt means to survive. 46—33-36

> There is just something about the great outdoors that makes me feel so alive and wonderful I just like it out here. 65—28-29

I think that this trip has given me a new outlook on life and how life should be. I also beleive this trip will help me get along with others better. Not to mention myself. I beleive that an experience like this is good for all the students. I think that this trip will help me alot in Job corps for the reasons that it will geve me a better relationship with the students and it will help me realise what is truly important in life. 108—4-11

The trip was like an excape from the real world I got a chance to explor mother Nacher to notic how all the small things make the difference. If I had the chance I would of done this a long time ago if I knew it would be like this and hopefully I wll have the chance to do it again. 99—11-15

Over this whole trip I learned many things about myself. One of the most important things I learned was that no matter how tough things are ahead of me it doesn't help to give up, but go forward and do my best. 39—17-20

I am getting to know myself a lot better.
I feel College, working, and marriage is alot considering my age, only being 17, but inside my heart, mind, and soul, has wanted and been ready for all these things to come. I'm becoming content with my future plans and in my life I plan to accomplish anything and everything I can get out of life! 10—18-24

I was the first person to camp again and when I do that it brings my self esteam up a little bit and it makes me feel good inside. 18—1-3

I woke up on day 5 and my hair was really scragly. I like it this way because I am in a place were I dont have to worry about my hair this afternoon I went a little crazy with everything. I never told this before but I love to wright poetry. I have written poetry since 6th grade. 22—5-9

On the hike [three of us] repaired some of the trail. It felt good to be fixing nature, to be doing something good for something else besides me. 13—6-8

So far I've figured out that Ive grown away from my religion a lot. Thats the one thing my mom told me never to do. In a way comeing here has helped me realize that maybe going back to my old ways isnt such a bad idea. 5—29-32

I am figuring out that I depend on [my boyfriend] too much and that I am capiable of doing things on my own. I don't always need [him] but it is nice to have him around. 80—6-9

I can’t remember the last time I felt so good inside, I can't believe I feel this way, so now I must decide. I use to hate decisions and I couldn't stand to be confused, but no matter what I did before I got frustration. Now here I am at 19 years still just wandering along, looking for a way of life that I find good, pure and strong. 58—34-36; 59—1-3

I feel good and I made it I did better then I thought I could do there was so meny times I felt screeming for joy. 60—13-15

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> Sometimes I only said them out of spite, but I think they are starting to understand me.

> I think this trip helped me grow up alot and Ive seen that it as help the other guys a lot thats good. I feel tht this trip is going to help me for the rest of my life and the other gutys to. Ive learned more about friendship than I ever new. This is a wounderfule trip. 103—7-12

> To day is the last hike we have to do it is good to be on the last hike. but I do not like it because I have to go back to job core I love being out here I stopped smoking I feel good about myself. 20—25-28

> We're leaving now. I feel sad in a way. I touch my hands to the window pane, wanting to feel the soft green leaves, to walk on a dirt path and be shaded from the sun by trees older than I. I want to feel the sharp coldness of a fresh, little stream and be wind dried by a cool breeze again. But I know I have to go back, I have to finish goals and plans that I've set for myself. I just hope that there will be something left for me to go back to and say "I was once a part of this place, I was here, and this place will always be a part of me." 70—10-19

> today was very fun when I get back to center this will have taught me that I could do alot of things I didn't think I coud do. 106—23-25

Exit Interviews

In asking the students this question, we wanted them to verbalize what it was they learned on the trip that they could apply to their lives back on center. By verbalizing these lessons, students reiterate the skills they have learned on WD which reinforce the changes they would like to make upon returning to center. Helping students apply these skills is a big step in reinforcing their experience and keeping the wilderness light burning in their every-day lives.

Table 17 contains categories which emerged from the question *What kind of changes will you make when back at Job Corps?*

Table 17. What kind of changes will you make when you return to Job Corps?

Categories	Number responses from all centers (Percent)
New attitude—can achieve goals now	104 (35%)
Communicate more with people and authority figures, be more open minded	90 (33%)
To respect and be more patient with others—Take time-out to think	25 (9%)
Other	57 (21%)
Total	276

Having achieved something so dramatic for perhaps the first time in their lives helps students realize they can accomplish every day tasks if they just put their mind to it. Goals are discussed daily in Wilderness Discovery and students are encouraged to verbalize setting and processing why they achieved *or* did not achieve these goals. For dealing with failure to achieve goals properly can be as important as reaching a goal.

WD participants noted that they feel as though have a new attitude after the experience and have learned they can achieve goals they have set for themselves. Goal setting is a critical skill that is often not learned by ESDY (Felner et al., 1995). By learning to set and achieve goals, self confidence is impacted and can be reinforced in small doses. Too often goals such as "make a ton of money" and "be a doctor" are stated with no real tangible movement made by students towards that goal. This can limit the drive of students who cannot see far enough into the future to realize their day-to-day actions are affecting their future life prospects

Communicating with peers and authority figures is a critical skill that strikes the core of overcoming dysfunctional interpersonal relationships. WD participants felt they had learned they can communicate more with people, including authority figures. Improving a student's ability to communicate can strengthen their productivity at Job Corps, and later as they enter the work place. It has been shown that ESDY are often successful in obtaining a job, yet many have difficulty keeping them due to stress, poor communication skills, and problems dealing with authority figures in the workplace (Schwetz, 1984). As jobs become consolidated, and the middle-level management work force is reduced, many new jobs are requiring entry-level workers to be more involved in problem-solving activities and customer relations (CED, 1990). The American Society for Training Development states, in a list of skills needed in today's work force, that "communication, both listening and oral, is invaluable and rarely emphasized in today's formal educational training" (CED, 1990, p. 68).

Enhancing respect, especially for persons in positions of authority, could also benefit students in the work place. Job Corps students are unaccustomed to the rigid rules and the positions of authority many staff have over them (Navarro and Associates, 1990). This leads to conflicts with authority figures, and, many times, termination of the student. The workplace is an environment very similar to Job Corps, with many Job Corps graduates losing newly acquired jobs, because they cannot handle the stress and routine of their relationship with superiors (Schwetz, 1984). One of the most common mistakes that managers make is to assume that providing direction is equivalent to issuing commands (Bresnick, 1989). Corps members have a difficult time adhering to commands and rules from superiors, but violating them many times means termination or the loss of a post-Job Corps job (Schwetz, 1984). Learning to have respect for authority figures could mean the difference in keeping their job.

Focus Group

The following benefit categories relate to Research Question 3 What skills or lessons have Wilderness Discovery participants learned on the wilderness experience that they will bring back to their every day lives ti improve their well-being? It is noted here that many of these categories could relate to other research questions. Each category uncovered in the analysis of focus group responses was reasoned to be related to only one question to strengthen the internal validity of the study.

Self-Confidence

Improving the confidence of young people is perhaps one of the biggest challenges the Job Corps faces (Reich, 1994). Self-confidence was noted across all four centers as a benefit received by students from participating in the Wilderness Discovery program. Table 18 contains three excerpts placed into the self-confidence category, followed by their dimensions of complexity.

Table 18. Responses by WD Steering Committee focus group participants grouped into the Self-Confidence benefit category, ranked from more simple to more complex.

	Job Corps Centers			
Benefit Category	**Case 1:Curlew**	**Case 2:Trapper Creek**	**Case 3:Atlanta**	**Case 4: Timberlake**
Self-Confidence	Self-confidence and peer acceptance	Increased participation and enthusiasm-More confident	Self-confidence	Sense of confidence

MORE SIMPLE ← → MORE COMPLEX

Sense of Confidence — Self-Confidence and Peer Acceptance — Increased Participation; More Confident

The lines separating definitions of self-concept, self-esteem, self-perception, locus-of-control, and self-confidence are very thin. A definition presented by Maxwell (1992) defines self-confidence as the *confidence in one's self and in one's power's and abilities* (p. 141). Job Corps staff believe that Wilderness Discovery benefited the students by enhancing their self-confidence, which can impact their behavior on center in a number of ways.

On the more simple end of the spectrum, enhanced sense of confidence suggests that students are beginning to gain confidence, but it is not as strong a statement as possessing self-confidence. Moving up the spectrum, peer acceptance emerged as an associated concept with self-confidence. If the students feel more confident in their own power and ability, they may be more accepting of their peers. Peer acceptance is a big step for young people who have learned to trust only themselves and regard cultural and social differences with animosity.

Increased participation and enthusiasm by students in Job Corps activities was also associated with enhanced self-confidence. ESDY do not like to try things which are new, because they are often afraid of failure (Windle, 1991). Having students more involved with on center activities and enthusiastic about their studies or vocational programs could go a long way in helping reduce one of the biggest problems confronting the Job Corps program—early termination (Navarro and Associates, 1990). Job Corps staff are constantly trying to get students involved in more recreation activities on center. If Wilderness Discovery is seen to help increase their participation and enthusiasm, this could positively impact students in Job Corps long enough to help them complete their training.

relationships presented.

Challenge

The challenge category was based on excerpts taken from three centers. Table 19 illustrates those phrases, followed by a description of their dimensions of complexity.

Table 19. Responses by WD Steering Committee focus group participants grouped in the Challenge benefit category

	Job Corps Centers			
Benefit Category	**Case 1:Curlew**	**Case 2:Trapper Creek**	**Case 3:Atlanta**	**Case 4: Timberlake**
Challenge	Stretch comfort level	Learn about their limitations and interests	Pushed the students harder then they ever have been pushed	--------------------

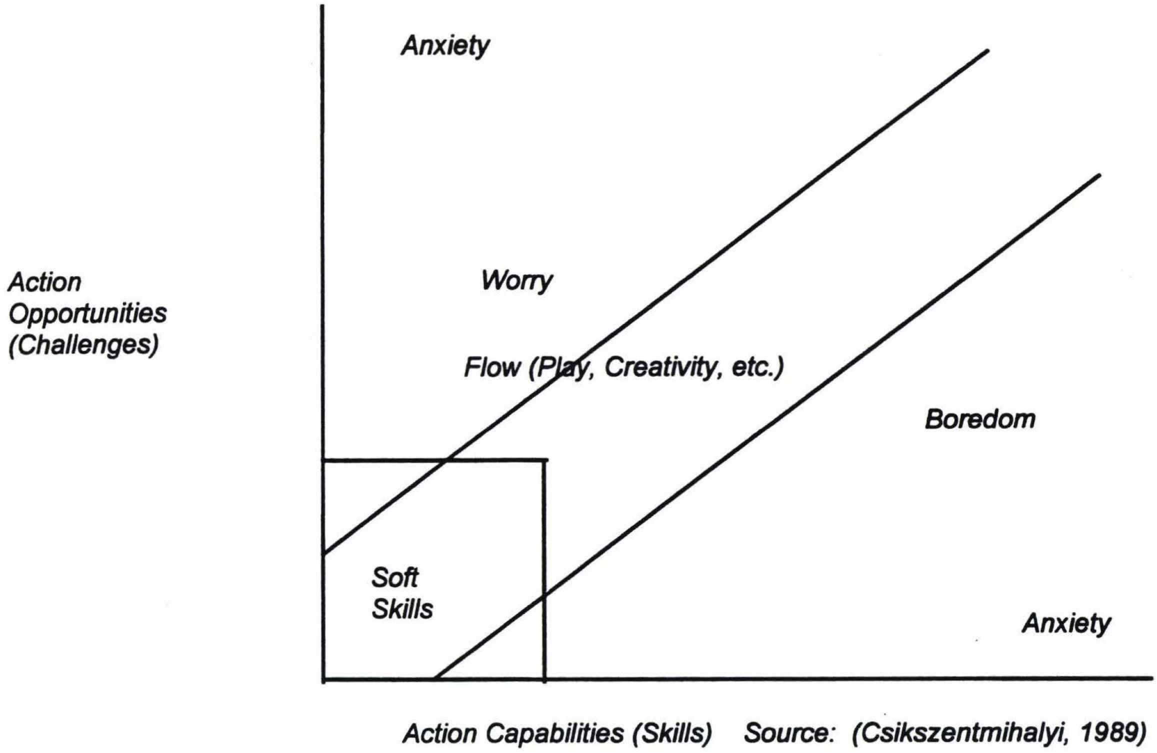
MORE SIMPLE MORE COMPLEX

Learn about their limitations and interest ↔ Stretch comfort level ↔ Pushed students harder than they have ever been pushed

Wilderness Discovery is a soft skills, low stress, low risk wilderness experience program that focuses on reflection, group processing, and wilderness travel. The program is not designed to physically challenge the students to a level that would significantly increase anxiety. Two goals of the program are to achieve what Csikzentmihalyi (1989) termed "flow" (see figure 4 following page), and what Hendee and Brown (1988) term optimum stress that will "open them" to benefit from the experience.

"Flow" can be defined as, "the space where "Action Challenges" presented to participants are equal to the "Action Capabilities" of the participant (Csikzentmihalyi, 1989, p. 10). This equates to optimum stress where students are able to just overcome the adversity and still succeed.

Figure 4. Graph of "flow" achieved when Action Challenges parallel the Action Capabilities of student participants


Anxiety
Action
Opportunities
(Challenges)
Worry
Flow (Play, Creativity, etc.)
Boredom
Soft
Skills
Anxiety
Action Capabilities (Skills)

Source: (Csikszentmihalyi, 1989)

"Learning about their limitations and interests" was placed on the more simple end of the spectrum, because it is a good start in meeting challenges with determination. In doing this, students learn that there are limitations to what they can do, and they should focus on what they can accomplish and how to overcome that challenge.

The more complex end of the spectrum illustrates that Wilderness Discovery can push students to limits they have never experienced. It is important to note that these limits are not just physical. Students are placed in an environment for seven days that is completely foreign to them. The mental strain of realizing they have six more days after the first night or dealing with strange noises and darkness each evening can be very powerful for students who have never experienced the wilderness before.

By challenging WD participants in a non-threatening manner and offering them a chance for success, self-confidence is enhanced and students leave the experience thinking that they can accomplish something once they put their mind to it. Self-confidence is critical for helping Job Corps students complete their educational and vocational training and find and keep a job. These skills learned on Wilderness Discovery improves students' well-being while in Job Corps and increases their likelihood of success upon graduation.

Research Question 4: What evidence is there that Wilderness Discovery participants exhibit more functional social behavior which allows them to develop friendships and make new acquaintances while on Wilderness Discovery?

Student Journals

During the course of the week long wilderness trip students were encouraged to reflect on the other members of their group. This was done in group circles and students were encouraged to speak both honestly and positively. For example, if a student had a problem with another member of the group they were encouraged to share the problem *and* offer a constructive solution to the problem. Many students wrote about the group, even though not specifically asked to include their perceptions of the other group members in their journals. The following journal excerpts support the notion that students developed friendships and communicated with peers in ways in which they were not accustomed.

I think the other people are doing really well for not ever doing this before we all stick together and help each other out which usually doesn't happen at Job Corps which I think is really neat (9435ii-a3/845).

I respect the Wilderness alot more because it showed me ways to let go of anger and it brought us togather alot more (9428iii-a2/480).

Everyone can be their selves more out here because you aren't in a big group so you don't have the popularity thing to worry about (9434--b1/780).

I was full of love the whole time we heard there was skin heads here and everyone sleep by me and said [name excluded], we got your back and we don't care if your Black no-one will get to you or hurt you I felt a closeness ive never felt before it was almost like protection from my homies back at the hood

I enjoy the company on this hike. There is a lot of willing support for one another. 11-35-36

every body here is getting a long great that's why I like camping so much is that everyone can get a long. 64-12-14

It toke us a long time to put up camp. Me and my friends didn't now what to do but when you work as a team you can get a lot of things done. 101-33-35

Some of these guys just can't get out of society. Most of the trip has been spent talking about movies, gangs, sex, ect. and I really am annoyed by it. I guess some people you can't expect to grow outside of the materialistic part of society. 89-20-24

A respect for these people has grown in my heart. This is a time I will remember for the rest of my life and for eternity. 67-5-7

Exit Interviews

Students volunteer to participate in Wilderness Discovery. A WD Steering Committee of Job Corps staff pick students from a list of volunteers and for each trip forms a group of nine students and one Job Corps staff. The guiding principle in forming the group is to choose those students who are not friends on center, and ideally three students who demonstrate leadership and responsibility on center, three students who lack motivation and have found trouble in either their vocation or in classes, and three students who could go either way. The idea is to put students together who don't know each other, and are from different "cliques" on center.

A community ethic is introduced on the first day of the trip and a "contract" is established by all group members who agree to commit to the safety of themselves and the group, and to foster a community ethic throughout the trip. Table 20 contains responses to the question asking students to describe how they feel about the group and its accomplishments. Table 21 then presents categories of response generated from content analysis of narrative answers.

Table 20. Responses to the question of: How do you feel about the group and the things you accomplished as a group over the last seven days?

	Job Corps Centers (1994-1995) (Percent)				
	Atlanta*	**Timberlake**	**Trapper Creek**	**Curlew**	**Average**
Good	88	100	94	96	94
OK/Bad	12	0	6	4	6
Total	100	100	100	100	100

***Data for 1995 only**

Table 21. Categories generated from content analysis to the question: How do you feel about the group and the things you accomplished as a group over the last seven days?

Categories	Number responses from all centers (Percent)
Got to know them better/More open with them	145 (53%)
Became a family/Really came together	55 (20%)
Got frustrated with them	15 (6%)
Saw a different side of people	5 (2%)
Other	56 (20%)
Total	276

An overwhelming majority (94%) of the students stated they felt “good” about the group and the goals they had accomplished. The other 6% said they felt “OK” or “bad” following that response with a declaration that the other students had gotten on their nerves or were not helping out. Spending twenty-four hours a day with the same group of people, with cooperation mandatory in very stressful and challenging situations was quite a task for Job Corps students. When asked to elaborate on the question of why the students felt good about the group, responses were very revealing, and were similar to goals and objectives of Wilderness Discovery-- to create an opportunity for students to open up to one another and get to know other students they normally would not at Job Corps.

Fifty-two percent of the respondents stated they got to know the other students on the trip better, and were more open in sharing their feelings with them. This is a big step for many Job Corps students, who are reluctant to trust anyone with their feelings for fear of ridicule or embarrassment. The trust and respect that is developed among the members of the group allows for this exchange of feelings, dreams, and stories in an open and honest way. Many students stated that one thing they were going to bring back to center, a lesson learned from group circle meetings, was to give other students a chance and to not judge people by what others say.

Many participants (20 %) stated that their group was much more than just a group, they had in fact become "a family," and really came together towards the end of the trip. These statements by students have wonderful significance for a group of young people who hail from dysfunctional families and look elsewhere for feelings of caring and security. Many groups continued meeting together months after WD was over, an action encouraged by WD leaders to help keep the lessons alive in the hearts and minds. This is an approach that is being incorporated into WD protocol to strengthen and reinforce the effects the program has on participants after they return to Job Corps.

Six percent stated they had become frustrated with the group and were glad the trip was finally over. This is perfectly natural for a few students to feel left out, and frustrated by the group. It is the goal of every WD leader to spot these potential problems while on the trail to help remedy the situation, but the fact is that some students simply are not compatible.

Establishing a sense of community is a primary goal of the Wilderness Discovery experience. By helping students work together and complete difficult communal tasks that require high levels of social skills and interaction, Wilderness Discovery reinforces and provides students with an experiential opportunity to practice social skills taught at Job Corps. Moreover, participants are making new friends and creating a group that understands what they went through in the wilderness and will be there to relive the good and bad moments of the trip.

Focus Groups

As noted earlier, many focus group categories could relate to Research Question Four. The categories Communication and Teamwork/Cooperation reflect the notion that Job Corps staff believed that students learned communication skills and were getting along and working together while on Wilderness Discovery.

Communication

Communication was mentioned at all four centers as a benefit gained from participation in Wilderness Discovery. Table 22 describes the four excerpts described by WD Steering Committees at each center that were placed into the communication category, followed by the simple to complex category dimensions of that category.

Table 22. Responses by WD Steering Committee focus group participants grouped in the Communication benefit category, ranked from more simple to more complex.

	Job Corps Centers			
Benefit Category	**Case 1:Curlew**	**Case 2:Trapper Creek**	**Case 3:Atlanta**	**Case 4: Timberlake**
Communication	Ability to speak to authority figures	Learn practical skill from teamwork	Learn to express feelings better	- Made new acquaintances - Developed leadership skills

MORE SIMPLE MORE COMPLEX

Made New Acquaintances	Learned Practical Skill from Teamwork	Developed Leadership Skills	Learn to Express Feelings Better	Ability to Speak to Authority Figures

All four centers felt in some way that Wilderness Discovery helped students learn to communicate better. The dimensions illustrate that students have benefited from WD by enhancing their communication skills in many ways. For example, even "making new acquaintances," on the more simple end of the spectrum, suggests students are breaking down their barriers and talking to students whom they normally would not associate with on center.

Violence at home, parental criminality, and serious medical problems may separately or collectively interfere with ESDY having difficulty associating with their peers (Windle, 1991). The statements by focus group members imply that students are willing, and in many cases forced, to communicate with students who are from different social groups on center while on Wilderness Discovery. This is a big step for many students.

On the more complex end of the spectrum, "ability to speak to authority figures" represents a more complex form of communication for ESDY, since they often have problems with people in authority positions due to their upbringing (Navarro and Associates, 1990). The authority figures whom they have been in contact with have been teachers, law enforcement officers, social workers, and their parents. These contacts have been historically negative, painting the picture that authority represents a threat to the student's well-being. The ability of Job Corps students to communicate with authority figures is seen by Job Corps staff as a major benefit to the student participants.

Teamwork /Cooperation

All four centers mentioned an improved ability to work with others (Teamwork) in a community environment. Table 23 includes the four excerpts by each focus group placed into the communication category followed by the dimensions of complexity for that category.

Table 23. Responses by WD Steering Committee focus group participants grouped into the Teamwork/Cooperation benefit category, ranked from more simple to more complex.

	Job Corps Centers

Benefit Category	**Case 1:Curlew**	**Case 2:Trapper Creek**	**Case 3:Atlanta**	**Case 4: Timberlake**
Teamwork/ Cooperation	- Opportunity to help others - Male and female on equal footing - Other students seen in a different light	Learned practical skill from teamwork	- Opportunity for caring and sharing with each other - Learned the importance of teamwork - Learned acceptance of others	- Enhanced trust in themselves and others - Developed leadership skills

MORE SIMPLE			MORE COMPLEX
- Male and Female on Equal Footing - Other Students Seen in a Different Light	- Learned Acceptance of Others - Opportunity to Help Others - Opportunity for Caring and Sharing with Each Other	Developed Leadership Skills	- Learned Practical Skill from Teamwork - Learned the importance of Teamwork - Enhanced Trust in Themselves and Others

WD Steering Committees felt that students learned to work together by by learning to cooperate with each other to get things done on the trip. On the more simple end of the spectrum, learning to accept others and breaking down gender differences is a major step for ESDY. These were placed on the more simple end of the spectrum, because they are viewed as a good starting point for students working with people different than themselves.

Moving up the spectrum, students were perceived to have learned the importance of teamwork and the practical skills necessary to cooperate with people to get something done. Many ESDY have learned to survive on their own. At the more complex end of the spectrum is enhanced trust in themselves and others. Students have a difficult time trusting anyone, especially themselves. Wilderness Discovery is perceived by staff members to help students learn to trust in themselves and others.

Chapter 9. Summary and Conclusions

This chapter summarizes the study and suggests some conclusions and recommendations for actions based on the implications of the study's findings. Any study is based on the assumptions, methods, and logic that guide it. Thus, the conclusions and recommendations of this study are based on the method of using data from student journals, exit-interviews of student participants upon completion of the WD program and expert consensus judgments by Wilderness Discovery Steering Committees of Job Corps staff at Curlew, Trapper Creek, Atlanta, and Timberlake Job Corps Centers. This triangulation method addressed four research questions presented in a theoretical framework guided by the constructs of the development of the self (DOS) and the development of community (DOC).

Key findings from the Wilderness Discovery pilot program and study were that participants developed enhanced self-esteem, a spirit of teamwork, cooperation and communication, and a greater appreciation for how the Job Corps can help them meet their individual goals. Early and/or involuntary termination rates were reduced by up to 35%, and nearly every student participant discovered that their abilities vastly exceeded their expectations about themselves. With each new success encountered during the trip, their confidence and their sense of self-esteem grew. We can, therefore, speculate metaphorically that in some difficult future life situation there will be at the least the potential for students to recall their wilderness experience and remember, "Hey, I can do this. I've overcome difficulties before!" The following conclusions are drawn from analysis of the evidence presented which addressed the four research questions.

Conclusion 1. Students were able to relax and attune themselves to the wilderness environment and reflect on their lives and their role in Job Corps.

Research Question 1 asked what effect did the wilderness environment have on the emotional states and thought processes of Wilderness Discovery participants. Students were able to relax and attune themselves to the wilderness environment and reflect on their lives and their role in Job Corps.

This question was designed to elicit responses from Job Corps students as to the benefits of wilderness. What is it about wilderness that allows students to reflect on their lives? Wilderness has many meanings for many people and students were given the freedom to define wilderness in their own mind before answering. Their responses revealed rich insights into how wilderness can be both the classroom and the teacher to people willing to slow down long enough to listen.

In the wilderness environment students had countless opportunities to experience both individual and group success as they adapted, adjusted and tuned in to the demands of the novel surroundings (e.g., Kaplan & Kaplan, 1989). An underlying assumption of Wilderness Discovery is that experiencing success in one context (i.e., the wilderness) should lead to continued experiences of success in other contexts (i.e., Job Corps and/or the larger society). One of the primary goals of the Job Corps program is to assist students in their efforts to adapt to the larger society through a combination of vocational, educational, and social skills training.

Slowly but surely almost every participant began to accept the possibility of succeeding at whatever tasks they were attempting in the wilderness setting. This is in sharp contrast to the "learned helplessness" and personal expectation of failure that nearly all Job Corps students had previously acquired in cultural contexts. As students adapted to the wilderness their anxiety was reduced and much of their anticipation changed from the anticipation of failure to the expectation of success.

Students revealed that wilderness allows people an opportunity to remove oneself from the hustle and bustle of everyday life. Getting away from the stress of Job Corps and experiencing true peace and quiet was the primary benefit to 35 percent of WD participants. Slightly less, about 30 percent, noted that the wilderness teaches respect for the natural world as well as respect for others, a metaphor emphasized in WD. Having time and an environment in which to reflect on their role in Job Corps and their lives was seen as a benefit to 11 percent of participants, while 10 percent stated that wilderness taught them to appreciate what they have in their lives, and the beauty found in nature. And finally, 9 percent of WD participants pointed out that wilderness offered an experience that they could learn from--learn about nature, other people and most importantly, themselves.

Responses by students to this question were very positive, illustrating the work of WD leaders in articulating the meaning and power of the wilderness to Job Corps students was well received. The ability of students to apply the wilderness as a metaphor to issues relevant to their lives describes an advanced form of comprehension. This comprehension of the benefits of wilderness by students is perhaps the ultimate form of piecing together what the Wilderness Discovery experience is all about. The experience is about peace and quiet, respect, reflecting, appreciation, and learning.

Focus group responses summarized in Figure 5 reinforce the notion that wilderness environments are unique in the benefits they provide to ESDY. Students were exposed to something they otherwise would not have been exposed to. This is strongly reinforced by our findings that 92 percent of WD participants had never been on a backpacking trip before, and of that 92 percent, 83 percent had never been presented the opportunity. The quiet time offered them a chance to reflect on their lives and role in Job Corps, and taught wilderness and environmental awareness.

Table 24. Summary of categories to focus group responses related to research question 1: What effect did the wilderness environment have on the emotional states and thought processes of Wilderness Discovery participants?

Appreciation/ Exposure to New Experience	Opportunity to experience something they would have missed	Learned camping skills and wilderness travel	Exposure to an outside and different experience	Developed new leisure skills
Reflection/ Introspective	-Opportunity to reflect on and deal with personal issues	Ability to be introspective and reflect	Neutral environment to confront personal issues	Gained insight into themselves and other students
Wilderness/Env. Awareness		Awareness of wilderness as a positive experience		Enhanced env. and wilderness awareness

One has to wonder how such changes might be "measured" and what effects such changes might have on students when they return to the Job Corps center or later in life when they re-enter society. Adaptation/attunement may occur in many cultural settings, but the scale and range of adaptation possible in the wilderness, the overwhelmingly positive effects of successful adaptation on individual self esteem, and the immediate feedback provided by the wilderness environment are impressive.

Conclusion 2. Students returned from WD physically and mentally refreshed and realized they can accomplish set goals

Research Question 2 asked what renewed sense of vision or commitment to a future path did students express upon completion of Wilderness Discovery? Students returned from the wilderness experience physically and mentally refreshed. Many realized for the first time that they can accomplish set goals when they put their mind to it and should appreciate the things they have and not take things for granted. As stated earlier, adolescence is a critical stage of possibility in the life course of an individual, with questions begging answers as to the future possibilities which one can expect.

On Wilderness Discovery, participants were isolated from familiar culture while in the wilderness, but moreover, were also encouraged to spend time alone in reflection on their current situation, their future possibilities and steps necessary to realize set goals. For many adolescents, they have never spent more than a few hours alone, and the experience of an single-or multiple-day solo was a powerful experience, one that required a multitude of fears. The findings from this study suggest that students used the time in the wilderness to reflect on their lives and future. Students wrote an average of 2.2 reflective comments per trip questioning past behavior and stating they wanted to make a new commitment to their future. This time alone in the wilderness helped participants not only think about their possible future, but also explore ways to realize goals and dreams.

Due to the very nature of wilderness experience trips, the opportunity to participate in a ritual rite-of-passage was provided by simple and practical day-to-day activities. This experience provided powerful opportunities to mirror the experience back to the Job Corps students through careful facilitation using metaphor, ceremony, group discussion, and journal writing. Through careful facilitation, the group leaders discussed with participants the emotions, feelings, and experience they have just gone through while on Wilderness Discovery. This experience helps prepare the individual and group to begin the most difficult task of the experience—re-entry into their familiar culture outside of the wilderness.

Through metaphor, focused journal writing, and careful facilitation of discussion participants reenter Job Corps with a renewed vision of their future. Many wilderness experience participants feel anxiety, depression, and apprehension anticipating returning back to the dysfunctional environments from which they came (Pitstick, 1995). This mirrors the apprehension felt by adolescents upon entering into adulthood. This experience, in a restorative environment, allows for the adolescent to develop and understand more clearly the self-concept that is emerging through biological and psychological growth.

Job Corps staff judgments about WD reinforce these conclusions. Figure 6 shows focus group responses concluding that Job Corps staff feel that WD participants realized a sense of accomplishement from participating in and completing a seven-day backpacking trip. In realizing this goal, staff also felt that participants self-esteem was enhanced.

Table 25. Summary of categories to focus group responses related to research question 2: What new or renewed sense of vision or commitment to a future path did students express upon completion of Wilderness Discovery?

Accomplishment	Students realized they had more capability than thought-sense of accomplishment	- Sense of accomplishment - Realize importance of experience	A sense of accomplishment	Self-esteem from accomplishment
Self-Esteem	Self-esteem-ability to speak up for themselves	Learn respect for themselves and each other		Self-esteem from accomplishment

Through the celebration of this important rite of passage for adolescence, participants were reassured and validated in their plight to realize their new future path and enter into adulthood. For ESDY, this process is vital, for the cultures from which they come are riddled with barriers that have created and encourage dysfunctional behavior and the inevitable postponement of the transition into the responsibilities of adulthood.

Conclusion 3. WD enhanced communication skills increased confidence and motivation, and taught goal setting skills

Research question 3 asked what skills or lessons have Wilderness Discovery participants learned that they will bring back to their every day lives and improve their well-being. Wilderness Discovery participants are returning from the experience with enhanced communication skills, they are more confident and motivated, have learned goal setting skills, and have learned to appreciate the things they have in life.
The extremely high percentages of respondents (96%) who indicated they had learned something on Wilderness Discovery they will apply to their lives back on center reflects the emphasis placed on this issue by WD leaders.

The striking conclusion drawn from the analysis of this question is that 33 percent of the students stated they would apply the communication skills learned from interaction with other students in the Circle. The impressive idea emerging from the responses is that students are stating they have learned what a valuable tool *listening* is. Every day WD trips hold "circles" to see how the group is feeling, discuss the day's activities or hike, or as a "check in" tool, to discuss any problems the students might have with the leaders, other members of the group, or a pressing issue they would like to share. The student with the "talking rock or stick" speaks while all others listen to what that person has to say. This power symbol allows even the quietest person an opportunity to speak and be heard. Students feel comfortable in this setting, as trust and friendship among group members grows throughout the week of intense group interaction and wilderness living. Instead of getting angry with their peers or authority figures, one-third of the students said they would try to talk it out and listen to what the other person has to say. This finding was a pleasant surprise to Wilderness Discovery, as the Circle is an integral component of the soft skills approach.

Students come off the Wilderness Discovery experience feeling refreshed and exited to be back at Job Corps. As one student said it best, "I can't believe I would ever be so happy to see this place!" Along with this renewed sense of self, 22 percent of the students state they are more confident in themselves and have a new attitude towards their role in Job Corps. For many, this is the first time they have completed something as difficult and trying as Wilderness Discovery. The parallel ideas of completing Wilderness Discovery and then completing Job Corps is a metaphor that returning students can comprehend and act on. For many students, this is the final push they need to complete their training and enter the workforce.

Students also note that they have learned valuable lessons from the physical and mental challenges put forth by Wilderness Discovery. If they can climb an 8000 ft. mountain with a 40 lb. backpack with blisters in the rain, then normal every-day challenges do not appear as daunting. Students responded to the question with statements like, "If I can make that mountain when I wanted to give up, then I know I can complete Job Corps," or "I know when the going gets tough I can hang in there and get through it." This sense of accomplishment can be a valuable tool for Job Corps staff back on center when facilitating a situation with a student. Reflecting on Wilderness Discovery, an accomplishment is only a memory away for that student. Fourteen percent of the students stated they were taking this sense of accomplishment back to Job Corps to use as a guiding force to help them complete their training and move on to a productive life.

Lastly, 9 percent of Wilderness Discovery participants stated they will be more patient and take time out to think when they are in a potentially bad situation with peers or authority figures, with 7 percent of the students also declaring they have a new appreciation for things, especially Job Corps, and will not take things for granted.

These revelations are a major step in helping students be more accountable for their behavior and how it affects those around them. For many Wilderness Discovery participants, this is the first time they were aware of their deficits in basic social skills, as small problems create noticeably bad situations in a wilderness setting where the group has to work together to accomplish even the simplest of tasks. It is this group dynamic that facilitates the awareness and eventually addresses aspects of students behavior that need attention. The key to making this interaction work is peer confrontation, students are hearing constructive criticism from friends, not authority figures. Students realize they are not the only student in Job Corps dealing with these issues and problems. Once this understanding is realized, students talk about issues in an open and respectful manner.

Job Corps staff noted that students are returning to center with a new-found respect for authority figures, teamwork skills, and heightened levels of self-esteem and self-confidence from achieving a difficult goal they set for themselves (see table 26). These learned skills strongly support the conclusion that Wilderness Discovery can help students remain in Job Corps long enough to complete their educational and vocational training. This is evidenced by a 23 percent reduction in early termination rates of WD participants compared to matched pairs of non-WD participants.

Table 26. Summary of categories to focus group responses related to research question 3: What skills or lessons have Wilderness Discovery participants learned on the wilderness experience they will bring back to their every-day lives to improve their well being?

Self-Confidence	Self-confidence and peer acceptance	Increased participation and enthusiasm-More confident	Self-Confidence	Sense of confidence
Challenge	Stretch comfort level	Learn about their limitations and interests		

Consistent findings in the literature suggest that when participants complete a wilderness experience program, the effects are most recognizable and strongest in the short run, but eventually taper off (Russell and Hendee, 1997). Mathematica Policy Research Inc. (1985) in a study of Job Corps students suggests a decay rate of Job Corps effects upon graduation related to employability and other variables at 14 percent per-year.

The conclusions drawn from this analysis is that the effects and benefits of WD to the students are more likely to take affect and be realized in the short term, upon return to center. These conclusions support the idea WD can reduce early terminations and enhance a student's employability. The renewed commitment students are making to their future can be realized while at Job Corps, an institution that is geared towards constant positive feedback to students. Learned social skills also enable students to communicate with peers and authority figures helping them realize their commitment to a better future.

WD directly targets social skills that Job Corps students will use while involved in social interactions on center and will need upon completion of their training. Many skills required by employers are evolving as the jobs being made available continue to change. Three quarters of new entrants into the job market will be qualified for only 40 percent of the new jobs created between 1982 and the year 2000 (Law, 1994). What is the new competency of skills required for the emerging labor force of the 21st century? Law (1994) included the following goals of formal education:

- the willingness to take initiative and perform independently;
- the ability to cooperate and work in groups;
- competence in planning and evaluating one's work and the work of other's;
- understanding of how to work with persons from different backgrounds;
- the ability to make decisions (p. 234).

The United States Secretary of Labor's Commission on Achieving Necessary Skills (SCANS) specified that upon graduation from high school, all potential workers should possess:

- the ability to work as a team and negotiate
- thinking skills, enabling them to detect and to solve problems
- high personal qualities, enabling them to work well with others (Law, p.240, 1994).

Figure 5 further illustrates the personal qualities which all workers should possess to achieve success in the workplace.

Table 27. SCANS personality qualities required for all potential workers (Law, 1994, p. 250)

Personal Qualities	**Description**
Responsibility	Exerts a high level of effort and perseverance toward goal attainment
Self-Esteem	Believes in own self-worth and maintains a positive view of self
Sociability	Demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings
Self-Management	Assesses self accurately, sets personal goals, monitors progress, and exhibits self-control
Integrity/Honesty	Chooses ethical courses of action

Again, the skills being called for by academicians, political figures, and business leaders all over the world are skills that aim to increase basic social skills that are often over looked in traditional education. By providing an opportunity to practice and apply these skills in a non-threatening environment, WD helps develop these skills by encouraging economically and socially disadvantaged youth to set and achieve goals they thought were impossible, and break down traditional barriers that inhibit students from solving problems and communicating with each other in an open and honest way. The development of these skills can help students set and achieve the goal of completing their educational and vocational training, better preparing them for the difficult task of obtaining a job and beginning their life.

Conclusion 4. WD participants learned communication, cooperation and teamwork skills

Research question 4 asked what evidence was there that Wilderness Discovery participants exhibit more functional social behavior which allows them to develop friendships and make new acquaintances while on Wilderness Discovery? WD participants had an opportunity to interact with peers in a way that required cooperation and teamwork to accomplish even the simplest of daily tasks. They were given a voice in the decision-making process, and were encouraged to share their feelings in daily group circles in which problems, expectations, and group decisions were processed.

Spending twenty-four hours a day with the same group of people, with cooperation mandatory in very stressful and challenging situations was quite a task for Job Corps students. When asked to elaborate on the question of why the students felt good about the group, responses were very revealing, and were similar to goals and objectives of Wilderness Discovery-- to create an opportunity for students to open up to one another and get to know other students they normally would not at Job Corps.

It is widely accepted in the social development literature that peer relations make unique contribution to social and emotional development (Berndt and Das, 1987; Burhmester, 1990). The constructs of peer acceptance and friendship are two aspects of peer relations that have been studied most extensively, and it is recognized that both play a significant role in the development and maintenance of self-esteem and interpersonal skills (Bishop and Inderbitzen, 1995). Fifty-two percent of the respondents stated they got to know the other students on the trip better, and were more open in sharing their feelings with them. This is a big step for many Job Corps students, who are reluctant to trust anyone with their feelings for fear of ridicule or embarrassment. The trust and respect that is developed among the members of the group allows for this exchange of feelings, dreams, and stories in an open and honest way. Many students stated that one thing they were going to bring back to center, a lesson learned from group circle meetings, was to give other students a chance and to not judge people by what others say.

Many participants (20 %) stated that their group was much more than just a group, they had in fact become "a family," and really came together towards the end of the trip. These statements by students have wonderful significance for a group of young people who hail from dysfunctional families and look elsewhere for feelings of caring and security. Many groups continued meeting together months after Wilderness Discover was over, an action encouraged by WD leaders to help keep the lessons learned on Wilderness Discovery alive in the hearts and minds. This is an approach that is being incorporated into Wilderness Discovery protocol to strengthen and reinforce the effects the program has on participants after they return to Job Corps.

Six percent stated they had become frustrated with the group and were glad the trip was finally over. This is perfectly natural for a few students to feel left out, and frustrated by the group. It is the goal of every WD leader to spot these potential problems while on the trail to help remedy the situation, but the fact is that some students simply are not compatible.

Focus groups noted that benefits received by WD participants included enhanced communication skills and the ability to work as a team and cooperate (see table 28). These are skills Job Corps staff know are vital in determining whether a student will graduate from Job Corps and find success in finding and keeping a job.

Table 28. Summary of categories to focus group responses related to research question 3: What skills or lessons have Wilderness Discovery participants learned on the wilderness experience they will bring back to their every-day lives to improve their well being?

Communication	Ability to speak to authority figures	Learn practical skill from teamwork	Learn to express feelings better	- Made new acquaintances - Developed leadership skills
Teamwork/ Cooperation	- Opportunity to help others - Male and female on equal footing - Other students seen in a different light	Learn practical skill in teamwork	- Opportunity for sharing and caring for each other - Learn the importance of teamwork - Learned acceptance of others	- Enhanced trust in themselves and others - Developed leadership skills

Establishing a sense of community is a primary goal of the Wilderness Discovery experience. By helping students work together and complete difficult communal tasks that require high levels of social skills and interaction, Wilderness Discovery reinforces and provides students with an experiential opportunity to practice social skills taught at Job Corps. Moreover, participants are making new friends and creating a group that understands what they went through in the wilderness and will be there to relive the good and bad moments of the trip.

Final Conclusions

The literature of wilderness experience program effects on participants, while consistently reporting benefits, also raises questions about longevity of effects (Gibson, 1990; Kaplan & Kaplan, 1989). The few studies addressing longevity suggest that when participants complete a wilderness experience program, the effects are most recognizable and strongest in the short run, but eventually (decay) taper off. Mathematica (1985) also suggests a decay rate related to positive effects of Job Corps on employability and other variables at 14 percent per-year. Thus, the effects and benefits of WD to the Job Corps students are also more likely to take affect and be realized in the short term, upon return to center. But this short term impact can help keep students in Job Corps, and by reducing early terminations, can enhance a student's employability--evidenced by studies done by Navarro and Associates (1990 and Mathematica (1992) on reduced early terminations.

The broader implications are that the benefits of wilderness experience programs are greater in the short term, but can be maximized by being part of a larger, continuing program aimed at the rehabilitation of ESDY, such as being in a special program at school, or a training program like Job Corps. The wilderness experience can heighten motivation and performance, which then helps them get more from the continuing self improvement program of which they are a part. Ultimately, the benefits from the wilderness experience program will decay, as will benefits from completing the Job Corps program.

WD and Other Wilderness Experience Programs are Relevant Educational Programs

WD directly targets social skills that Job Corps students use in social interactions on center and will need out in the real world upon completion of their training. Even more complex social skills are being required by employers as jobs evolve and change. Raizen (1991) characterized two different types of futures for American workers. The better educated can expect expanding opportunities and rising real wages, while the poorly educated face a future of poverty and contracting opportunities. For society and adolescents, the choice they need to make now is clear. Do we invest in the education that will prepare a growing population of economically and socially disadvantaged youth to meet the challenges of a growing and changing economy or let them slip through the cracks to become a permanent member of the underclass? The goals and objectives of Wilderness Discovery as an adjunct to Job Corps are to help students achieve the greatest goal of WD, completing Job Corps so they have a better chance to lead a productive and healthy life--to be producers of social and economic benefits and not consumers of them through public assistance.

The soft skill approach embodied in WD works well for Job Corps students

Wilderness Discovery was designed as a low risk, low stress, soft skills program featuring modest physical effort and emphasis on opportunities for attunement to nature, reflection, cooperation and sharing through community circles and joint responsibility for basic backpacking chores like cooking and cleaning. The focus was designed to emphasize success and cooperation because, typical of youth at risk, Job Corps students are likely to have experienced more failure and conflict in their lives than success and cooperation.

The soft skills approach worked! The use of multiple soft skills during wilderness trips proved extremely effective. Individual activities like alone time, reflection, and writing in journals, and group activities like community circles, team problem solving, and shared responsibilities for both individual and group safety provided students multiple opportunities to make discoveries about themselves, each other, and the wilderness. As they acquired new insights into themselves, each other, and the wilderness, student participants also discovered multiple opportunities to apply their insights. In other words, the discoveries were often immediately relevant to the students. Evidence of this could be seen in each group as they worked to become a functioning community, willingly shared responsibility for tasks through increased teamwork and cooperation, and discovered for themselves that issues could be resolved in the Circle without resorting to old behaviors and habits.

The wilderness setting is vital to WD in leaving the culture behind

From the students perspective, key wilderness features included naturalness, solitude, remoteness, and scenery, and the absence of influences that drive so much established behavior in the culture. The absence of dominant cultural influences in the wilderness setting created the psychological and physical space necessary that allowed students to utilize the various soft skill activities to gain new insights into themselves, their relationships with each other, their relationship with Job Corps, and their hopes for productive and rewarding lives. Thus, a wilderness setting (naturalness, solitude, remoteness from cultural influences) is a crucial component of the Wilderness Discovery experience.

Thus, in response to the question we have been often asked--is it necessary to operate Wilderness Discovery in designated wilderness?--we respond as follows. Many of the benefits of Wilderness Discovery depend on removing the students from their prevailing culture to an environment of naturalness, solitude and remoteness, where, in back to basics routines, new behaviors must be learned and practiced in order to deal with the elements. Since it is in designated wilderness that the greatest opportunities to experience naturalness and solitude exists, and thus the greatest opportunity to escape from prevailing cultural norms, designated wilderness provides more of the requisite environmental conditions for Wilderness Discovery to succeed. Of course in may roadless backcountry areas similar conditions exist (we have used them for WD) but their protection from cultural influences is not ensured, and they often feature less naturalness, solitude and remoteness than designated areas. .

WD received unanimous support by students and staff as a good program for Job Corps

Job Corps students think Wilderness Discovery is a good program (100%) and many reasons were given to support their universal view. It gives them a chance to think about their role in Job Corps and their future, and get away from the stress of Job Corps while providing time to think . Students felt it helps attitudes and motivation and gives them a chance to find themselves. All these reasons, plus the view that it helps students experience the wilderness who would not otherwise have the chance, support their 100 percent positive view that WD is a good program for Job Corps.

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